

SECURITIES AND EXCHANGE COMMISSION

FORM SC 13D

Schedule filed to report acquisition of beneficial ownership of 5% or more of a class of equity securities

Filing Date: **1998-03-23**
SEC Accession No. **0000950130-98-001360**

([HTML Version](#) on [secdatabase.com](#))

SUBJECT COMPANY

CHRYSALIS INTERNATIONAL CORP

CIK: **880456** | IRS No.: **222877973** | State of Incorporation: **DE** | Fiscal Year End: **1231**
Type: **SC 13D** | Act: **34** | File No.: **005-42040** | Film No.: **98570489**
SIC: **8731** Commercial physical & biological research

Mailing Address
575 RT 28
RARITAN NJ 08869

Business Address
575 ROUTE 28
RARITAN NJ 08869
9087227900

FILED BY

PENLABS INTERNATIONAL INC

CIK: **1057697** | IRS No.: **91169866** | State of Incorporation: **WA** | Fiscal Year End: **0630**
Type: **SC 13D**

Mailing Address
11804 NORTH CREEK
PARKWAY SOUTH
BOTHELL WA 98011-8805

Business Address
11804 NORTH CREEK
PARKWAY SOUTH
BOTHELL WA 98011-8805
4162134082

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13D
(Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO 13D-1(A)
AND AMENDMENTS THERETO FILED PURSUANT TO 13D-2(A)

UNDER THE SECURITIES EXCHANGE ACT OF 1934

(AMENDMENT NO. _____)

CHRYSALIS INTERNATIONAL CORPORATION

(Name of Issuer)

Common Stock, \$.01 par value

(Title of Class of Securities)

171188105

(CUSIP Number)

Peter Brent, Vice President, Legal Affairs
MDS Inc.
100 International Boulevard
Etobicoke, Ontario, Canada M9W 6J6

(Name, Address and Telephone Number of Person Authorized to Receive Notes and
Communications)

March 16, 1998

(Date of Event which requires filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to
report the acquisition which is the subject of this Schedule 13D, and
is filing this schedule because of Rule 13d-1(e), 13d-1(f) or
13d-1(g), check the following box .

CUSIP NO. 171188105

Page 2 of 5 Pages

1 NAME OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS

Panlabs International, Inc.
MDS Washington, Inc.
MDS Inc.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) []
(b) []

3 SEC USE ONLY

4 SOURCE OF FUNDS
WC

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS
REQUIRED PURSUANT TO ITEM 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION
Panlabs International, Inc., Washington State
MDS Washington, Inc., Washington State
MDS Inc., Canada

NUMBER OF 7 SOLE VOTING POWER
SHARES - 0-

BENEFICIALLY 8 SHARED VOTING POWER
OWNED BY 2,000,000 / (1) /

EACH 9 SOLE DISPOSITIVE POWER
REPORTING - 0-

PERSON 10 SHARED DISPOSITIVE POWER
WITH 2,000,000 / (1) /

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,000,000/(1)/

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

[_]

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

14.9%

14 TYPE OF REPORTING PERSON

CO

(1) The 2,000,000 shares of Common Stock, par value \$.01 per share, of the Issuer are issuable upon the exercise of a Warrant delivered to Panlabs International, Inc. (the "Purchaser"). See Item 4 below.

Page 2 of 5

ITEM 1(A). TITLE AND CLASS OF SECURITIES.

This Schedule relates to the Common Stock, par value \$.01 per share, of Chrysalis International Corporation (the "Issuer"). The address of the Issuer's principal executive offices is:

575 Route 28
Raritan, New Jersey 08869

ITEM 2. IDENTITY AND BACKGROUND

This Schedule is being filed by Panlabs International, Inc., a Washington corporation (Panlabs"), MDS Washington, Inc., a Washington corporation and the owner of 100% of the capital stock of Panlabs ("MDS Washington") and MDS Inc., a Canadian corporation and the owner of 100% of the capital stock of MDS Washington. The principal business and office address of Panlabs is: 11804 North Creek Parkway South, Bothell, Washington 98011-8805. The principal business and office address of MDS Washington is: 11804 North Creek Parkway South, Bothell, Washington 98011-8805. The principal business and office address of MDS Inc. is 100 International Boulevard, Etobicoke, Ontario, Canada M9W 6J6. The names, business addresses and occupational information for: (a) each executive officer and director of Panlabs, (b) each executive officer and director of MDS Washington and (c) each executive officer and director of MDS Inc. is set forth in Exhibit 7.1 attached hereto and incorporated herein by reference.

MDS Washington and Panlabs, through Panlabs's subsidiaries, are engaged in providing a variety of drug development services, primarily to pharmaceutical

clients. MDS Inc. is an international health and life science company based in Canada providing technologies, services and products for the prevention, diagnosis and management of disease.

Neither Panlabs, MDS Washington nor MDS Inc., nor, to the best of the knowledge of Panlabs, MDS Washington and MDS Inc., any director or executive officer of Panlabs, MDS Washington or MDS Inc., has been, during the last five years, (a) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (b) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

This Schedule is being filed in connection with transactions associated with a \$5,000,000 loan (the "Loan") by Panlabs to the Issuer. As is described in greater detail in Item 4 below, in connection with the Loan, Panlabs will receive a warrant to purchase up to 2,000,000 shares of Common Stock of the Issuer.

MDS Inc. transferred the funds to Panlabs to fund the Loan from MDS Inc.'s working capital. Panlabs may use its working capital, funds transferred by MDS Inc. to Panlabs from MDS Inc.'s working capital or, pursuant to the terms of the Warrant Agreement (See Item 4 below), all or a portion of the principal and accrued interest of the Note to purchase the shares of Common Stock of the Issuer issuable upon exercise of the warrant (See Item 4 below).

ITEM 4. PURPOSE OF TRANSACTION.

On March 16, 1998 Panlabs entered into a Note and Warrant Purchase Agreement (the "Purchase Agreement") with the Issuer. On that same date, Panlabs and MDS Inc. also entered into a Standstill and Confidentiality Agreement (the "Standstill Agreement") with the Issuer and a Warrant Agreement (the "Warrant Agreement"). Under the Purchase Agreement, Panlabs has advanced \$5,000,000 to the Issuer and has received the Issuer's Subordinated Note in the principal amount of \$5,000,000.00 (the "Note"). The Note, which bears interest at the annual rate of 6%, provides for semi-annual payments of interest and payment of the principal sum on March 16, 2001. In connection with the issuance of its Note, and pursuant to the Purchase Agreement and the Warrant Agreement, the Issuer also issued to Panlabs a warrant which permits Panlabs to purchase up to 2,000,000 shares of the Issuer's common stock, par value \$.01 per share, at an exercise price of \$2.50 per share (the "Warrant"). Pursuant to the Standstill Agreement, Panlabs and MDS Inc. have agreed that neither of them nor their affiliates will acquire any additional voting securities of the Issuer without the consent of the Independent Directors (as defined below) of the Issuer. Panlabs has also agreed that it will vote any securities acquired upon exercise of the Warrant for the election of the slate of nominees for election to the Board of Directors of the Issuer as selected by a majority of the members of the Board of Directors of the Issuer and on all other matters to be voted on by the

holders of voting securities in accordance with the recommendation of a majority of the directors of the Issuer that are not full-time

Page 3 of 5

employees of the Issuer (the "Independent Directors"). Panlabs has also agreed that it will only dispose of securities acquired upon exercise of the Warrant in transactions approved by a majority of the Independent Directors or in other transactions in which the securities are not sold, disposed of, or transferred to any person or group who or which would immediately thereafter, to the knowledge of Panlabs after reasonable inquiry, beneficially own 5% or more of the voting securities of the Issuer.

Representatives of MDS Inc. and its affiliates and representatives of the Issuer have had preliminary discussions concerning a variety of possible future arrangements, including joint ventures, collaborative research projects, joint marketing, and other collaborative business development initiatives or strategic alliances. In addition, MDS Inc. and its affiliates will evaluate whether it considers it appropriate at a future date to propose to the Board of Directors of the Issuer other transactions between MDS Inc. and its affiliates and the Issuer, including but not limited to mergers and other transactions which could result in the acquisition by MDS Inc. or its affiliates of control of the Issuer. Any such transaction, if proposed, would be subject to, among other things, the approval of the Issuer's Board of Directors.

ITEM 5. INTEREST IN SECURITIES OF ISSUER.

Except as set forth below, neither Panlabs, MDS Washington, MDS Inc., nor, to the best of the knowledge of Panlabs, MDS Washington and MDS Inc., any director or executive officer of Panlabs, MDS Washington or MDS Inc. beneficially owns any shares of Common Stock of the Issuer.

- (a) Panlabs, MDS Washington and MDS Inc. beneficially own an aggregate of 2,000,000 shares of Common Stock, which constitutes approximately 14.9% of the Issuer's total number of outstanding shares of Common Stock.
- (b) Panlabs, MDS Washington and MDS Inc. share the power to vote and dispose of the shares of Common Stock of the Issuer issuable upon exercise of the Warrant, i.e., 2,000,000 shares of Common Stock of the Issuer.
- (c) Except as described in this Schedule neither Panlabs, MDS Washington, MDS Inc., nor, to the best of the knowledge of Panlabs, MDS Washington and MDS Inc., any director or executive officer of Panlabs, MDS Washington or MDS Inc. has engaged in a transactions with respect to the shares of Common Stock of the Issuer during the past 60 days.
- (d) Not applicable.
- (e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERTAKINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.

Except for the contracts described in Item 4 above, to the best knowledge of Panlabs, MDS Washington and MDS Inc., no contracts, arrangements, understandings or relationships exist among the persons named in Item 2 above, or between such persons and any other person with respect to any securities of the Issuer, including by not limited to, transfer or voting of such securities, finders' fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

- Exhibit 7.1 - Executive Officers and Directors of Panlabs International, Inc., MDS Washington, Inc. and MDS Inc.
- Exhibit 7.2 - Note and Warrant Purchase Agreement effective March 16, 1998, by and between Panlabs International, Inc. and Chrysalis International Corporation.
- Exhibit 7.3 - 6% Subordinated Note of Chrysalis International Corporation dated March 16, 1998.
- Exhibit 7.4 - Warrant Agreement effective March 16, 1998 by and between Panlabs International, Inc. and Chrysalis International Corporation.
- Exhibit 7.5 - Standstill and Confidentiality Agreement effective March 16, 1998, by and among Panlabs International, Inc., MDS Inc. and Chrysalis International Corporation.
- Exhibit 7.6 - Security Agreement delivered by Chrysalis International Corporation to Panlabs International, Inc., dated March 16, 1998.

Page 4 of 5

SIGNATURE

After reasonable inquiry and to the best of their knowledge and belief, each of the undersigned corporations certifies that the information set forth in this statement is true, complete and correct.

Dated March 18, 1998

PANLABS INTERNATIONAL, INC.

By: /s/ Peter E. Brent

(Signature)

Peter E. Brent

(Name)

Director and Assistant Secretary

(Title)

MDS WASHINGTON, INC.

By: /s/ Peter E. Brent

(Signature)

Peter E. Brent

(Name)

Vice President and Corporate Secretary

(Title)

MDS INC.

By: /s/ Peter E. Brent

(Signature)

Peter E. Brent

(Name)

Vice President Legal Affairs and
Corporate Secretary

(Title)

<TABLE>
<CAPTION>

PANLABS INTERNATIONAL, INC.

<S>	<C>	<C>	<C>
Executive Officers:	Business Address	Principal Occupation	Citizenship
Christopher Ball, President & CEO	(1)	President & CEO of MDS Panlabs, Inc.	United States
Nicholas Dykstra, VP, CFO & Secretary	(1)	VP, Treasurer & Secretary of MDS Panlabs, Inc.	United States
Peter Brent Assistant Secretary	(2)	VP Legal Affairs & Corp. Secretary of MDS Inc.	Canadian

Directors	Business Address:	Principal Occupation	Citizenship
John Morrison	(2)	Chairman, MDS Pharmaceutical Services (2)	Canadian
Dr. Henry Pan	(1)	President, MDS Pharmaceutical Services (2)	United States
Peter Brent	(2)	VP Legal Affairs & Corp. Secretary of MDS Inc.	Canadian

</TABLE>

- (1) 1184 North Creek Parkway South, Bothell, Washington 98011-8805
- (2) 100 International Boulevard, Etobicoke, Ontario, Canada M9W 6J6.

<TABLE>
<CAPTION>

MDS WASHINGTON, INC.

Executive Officers:	Business Address	Principal Occupation	Citizenship
<S>	<C>	<C>	<C>
Wilfred Lewitt President	(1)	Chairman, MDS Inc.	Canadian
Edward Rygiel VP	(1)	Sr. VP, Corporate Development MDS Inc.	Canadian Canadian

Peter Brent VP & Corporate	(1) VP Legal Affairs MDS Inc.	Canadian
Secretary	MDS Inc.	

<TABLE>
<CAPTION>
MDS WASHINGTON, INC. (continued)

Directors:	Business Address	Principal Occupation	Citizenship
<S>	<C>	<C>	<C>
Wilfred Lewitt	(1)	Chairman, MDS Inc.	Canadian
Edward Rygiel	(1)	Sr. VP, Corporate Development MDS Inc.	Canadian

</TABLE>

(1) 100 International Boulevard, Etobicoke, Ontario, Canada M9W 6J6.

<TABLE>
<CAPTION>

MDS INC.

Executive Officers:	Business Address	Principal Occupation	Citizenship
<S>	<C>	<C>	<C>
Wilfred Lewitt, Chairman	(1)		Canadian
John Rogers President & CEO	(1)		Canadian
Douglas Phillips, Sr. VP, Finance & CFO	(1)		Canadian
Edward Rygiel SR. VP, Corporate Development	(1)		Canadian
Peter Brent VP, Legal Affairs & Corporate Secretary	(1)		Canadian
Ronald Yamada Sr. VP, Information Strategies & Corporate Affairs	(1)		Canadian
Anthony Businskas VP, Corporate Finance	(1)		Canadian
Robert Breckon VP, New Technologies	(1)		Canadian

John Gleason VP, Corporate Strategic Initiatives	(1)	Canadian
Brian Harling VP, Corporate Affairs	(1)	Canadian
Wilma Jacobs VP, Corporate Communications	(1)	Canadian

</TABLE>

2

<TABLE>
<CAPTION>
MDS INC., continued

Executive Officers:	Business Address	Principal Occupation	Citizenship
-----	-----	-----	-----
<S> Beverley Morden VP, Strategic Positioning	<C> (1)	<C>	<C> Canadian
James Reid VP, Organization Dynamics	(1)		Canadian
Kerry Thomas VP, Information & Information Technology	(1)		Canadian

Directors	Business Address:	Principal Occupation	Citizenship
-----	-----	-----	-----
Ruth Corbin	1235 Bay St., Suite 1000 Toronto, Ontario Canada, M5R 3K4	President, Decision Resources, Inc.	Canadian
Wendy Dobson	Joseph L. Rolmans Centre for Management 105 St. George St. Toronto, Ontario Canada, M5S 3E6	Professor & Director Centre for International Business Faculty of Management University of Toronto	Canadian
John Evans	One Yonge St, 6th Floor Toronto, Ontario Canada, M5E 1P9	Chairman of the Board Torstar Corporation Allelix Biopharmaceuticals, Inc.	Canadian
Wilfred Lewitt	(1)		
Robert Luba	Suite 2525, Box 36 121 King Street West Toronto, Ontario Canada, M5H 3T9	President, Luba Financial, Inc.	Canadian
John Rogers	(1)		

R. Michael Warren	1 First Canadian Place Suite 5100 Toronto, Ontario Canada, M5X 1K2	Chairman The Warren Group, Inc.	Canadian
-------------------	---	------------------------------------	----------

Roger Wilson	P.O. Box 20, 42nd Floor Toronto Dominion Bank Tower Toronto, Ontario Canada, M5K 1C1	Partner Fasken Campbell Godfrey	Canadian
--------------	--	------------------------------------	----------

Ronald Yamada (1)

(1) 100 International Boulevard, Etobicoke, Ontario, Canada M9W 6J6.
</TABLE>

NOTE AND WARRANT PURCHASE AGREEMENT

THIS NOTE AND WARRANT PURCHASE AGREEMENT dated March 16, 1998 is made and entered into by and between CHRYSALIS INTERNATIONAL CORPORATION., a Delaware corporation, having its principal office at 575 Route 28, Raritan, New Jersey 08869 (the "Company"), and PANLABS INTERNATIONAL, INC., a Washington corporation, having its principal office at c/o MDS Inc., 100 International Boulevard, Etobicoke, Ontario, Canada M9W 6J6 (the "Purchaser") (the Company and the Purchaser are referred to herein as the "Parties"). Capitalized terms not otherwise defined have the meanings given to them in Article 10 of this Agreement.

RECITALS

Subject to the terms and conditions of this Agreement, the Company desires to sell to the Purchaser and the Purchaser desires to purchase from the Company the Company's 6% Subordinated Note in the principal amount of \$5,000,000 due March 16, 2001 (the "Note"), in the form of Exhibit A hereto, and a warrant, as

evidenced by the Warrant Agreement (the "Warrant") (the Note and Warrant collectively, the "Securities"), to purchase 2,000,000 shares of the Company's common stock, par value \$.01 per share ("Common Stock").

AGREEMENT

In consideration of the foregoing and the representations, warranties, conditions and covenants contained herein, and subject to the terms and conditions of this Agreement, the Company and the Purchaser hereby agree as follows:

ARTICLE 1. ISSUANCE AND SALE OF THE NOTE AND WARRANT.

Section 1.1 Sale of Note and Warrant. The Company shall issue and sell to

the Purchaser, and the Purchaser shall purchase from the Company, the Note and the Warrant by paying the Company the purchase price for the Note and the Warrant (the "Purchase Price"), which Purchase Price shall be \$5,000,000 (the shares of Common Stock issuable upon the exercise of the Warrant are referred to herein as the "Warrant Shares" and the Note, the Warrant and the Warrant Shares, together with any other securities issued in substitution of, or exchange for, any of such securities are sometimes referred to herein, collectively, as the "Purchased Securities.")

Section 1.2 Closing. The consummation of the sale and purchase (the

"Closing") of the Note and the Warrant under this Agreement shall take place at such time, date, place and such manner as are mutually agreeable to the Company and the Purchaser. At the Closing, the Company will deliver to the Purchaser the Note against payment to the Company of the Purchase Price, by wire transfer in immediately available funds. The date and time of the Closing is hereinafter referred to as the "Closing Date."

ARTICLE 2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company hereby represents and warrants to, and covenants with, the Purchaser that:

Section 2.1 Disclosure Documents; Commission and Stock Exchange Filings.

Within the last twelve months of this Agreement, the Company has timely filed all regular, periodic and special reports with the Commission required to be filed by Section 13 or 15(d) of the Exchange Act (collectively, the "Exchange Act Reports"), and all reports and notices with The Nasdaq Stock Market ("Nasdaq") required to be filed by the Nasdaq Marketplace Rules and the Exchange Act (collectively, the "Nasdaq Reports"). Neither any Exchange Act Reports nor any Nasdaq Reports at the time such documents were filed with the Commission or submitted to Nasdaq, as the case may be, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein

or necessary to make the statements contained, in light of the circumstances under which they were made, therein not misleading.

Section 2.2 Financial Statements.

The financial statements contained in the Exchange Act Reports (a) have been prepared in accordance with generally accepted accounting principles consistently followed throughout the periods involved; (b) present fairly the consolidated financial condition and consolidated operating results of the Company as of the dates and for the periods indicated; and (c) disclose all known liabilities, contingent or otherwise of the Company as of the respective dates thereof, which are required under generally accepted accounting principles to be disclosed therein.

Section 2.3 Changes.

Since September 30, 1997, there has not been (a), except as disclosed on Schedule 2.3(a) hereto, any material adverse change in the business, assets, operation, condition (financial or otherwise) or prospects of the Company or any Subsidiary; (b) any liability or obligation of any nature whatsoever (contingent or otherwise) incurred by the Company or any Subsidiary, other than liabilities and obligations under any contract, agreement, instrument or commitment (each of the foregoing a "Contract") entered into in the ordinary course of the Company's and the Subsidiaries' respective businesses, which, individually or in the aggregate, are not material to the financial condition or operating results of the Company or any Subsidiary; (c) any disposition of any interest in any material asset or property of the Company or any Subsidiary, or any material asset or property of the Company or any Subsidiary made subject to any Lien of any kind other than the Permitted Liens; (d) any waiver of any valuable right of the Company or any Subsidiary, or any cancellation of any debt or claim held by the Company or any Subsidiary; (e) any payment of dividends on, other distributions with respect to, or any direct or indirect redemption, repurchase or other acquisition of, any interest in any securities of the Company or any Subsidiary, or any Contract with respect thereto; (f) any issuance of any securities of the Company or any Subsidiary, or any Contract with respect thereto; (g) any loan or other extension of credit by the Company to any Company Affiliate or Associate, employee or consultant (or any other Person), to any Subsidiary Affiliate or Associate, employee or consultant (or any other Person), or any Contract therefor, other than routine travel advances; (h) any damage,

destruction or loss (whether or not covered by insurance) affecting the assets, property, business or prospects of the Company or any Subsidiary; or (i) any change in the accounting methods, practices or policies followed by the Company or any Subsidiary, including any change in depreciation or amortization policies or rates.

Section 2.4 Indebtedness.

Neither the Company nor any Subsidiary has outstanding as of the date of this Agreement, or will have outstanding on the Closing Date, any Indebtedness, except for the Senior Indebtedness and other indebtedness incurred in the ordinary course of the Company's business.

Section 2.5 Liens

Except for the Permitted Liens and the Liens otherwise disclosed in the Exchange Act Reports, the Company or one or more of the Subsidiaries have good and marketable fee simple title to all of the Company's real property and a valid and indefeasible ownership interest in all of its assets reflected in the Company's financial statements contained in the Exchange Act Reports or subsequently acquired by the Company or any Subsidiary, other than those subsequently sold or otherwise disposed of in the ordinary course of the Company's business, free and clear of all Liens and security interests.

Section 2.6 Organization, Good Standing and Qualification; Authority.

The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as presently conducted and carry out the transactions contemplated hereunder. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which it conducts its business or where it is required to be so qualified except in such jurisdictions in which the failure so to qualify would not have a material adverse effect on its business, assets, operation, condition (financial or otherwise) or prospects. The Company possesses all requisite corporate power and authority to own and operate its properties and to carry on its business as now conducted and as proposed to be conducted. The Company has the requisite corporate power and authority to execute and deliver this Agreement, the Note and the Warrant and to perform its obligations hereunder and thereunder and, to the extent applicable, has taken all corporate or other actions with respect to the execution and delivery of this Agreement, the Note and the Warrant and has duly executed and delivered this Agreement, the Note and Warrant pursuant to all necessary corporate action or other necessary actions. This Agreement, the Note and the Warrant constitute legal, valid and binding obligations of, the Company enforceable against the Company in accordance with their terms, except as such enforceability may be limited by bankruptcy or similar laws affecting the rights of creditors generally and the availability of equitable remedies.

Section 2.7 Capitalization.

As of September 30, 1997, the authorized capital stock of the Company consisted of 20,000,000 shares of Common Stock, of which 11,404,575 shares were

issued and outstanding and 5,000,000 shares of preferred stock, par value \$.01 per share ("Preferred Stock"), of which no shares were issued and outstanding. All of the issued and outstanding shares of Common Stock have been duly authorized and validly issued and are fully paid and nonassessable.

Section 2.8 Validity of Securities.

The Note and the Warrant have each been duly and validly authorized and, upon issuance in accordance with the terms of this Agreement, will be validly issued and outstanding. The Warrant Shares have been duly and validly authorized and reserved, and upon issuance in accordance with the terms of the Warrant, will be validly issued and outstanding, fully paid and nonassessable.

Section 2.9 Authority; No Conflicts

No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with (each of the foregoing an "Approval"), any federal, state or local governmental authority on the part of the Company is required in connection with the consummation of the transactions contemplated hereby or by the Note and Warrant, except for filings under applicable federal and state securities laws. All such Approvals (if required) will, in the case of qualification, be effective on the Closing Date and, in the case of filings, be made within the time prescribed by applicable law.

Section 2.10 Burdensome and Conflicting Agreements; Violations of Charter Provisions.

Neither the authorization, execution and delivery of this Agreement, the Note or the Warrant, the consummation of the transactions herein and therein contemplated, nor the fulfillment of or compliance with the terms hereof and thereof, will conflict with or result in a breach of any of the terms of the charter, bylaws or other corporate restriction, or of any statute, law, rule or regulation, or of any judgment, decree, writ, injunction, order or award of any arbitrator, court or governmental or regulatory

authority, or of any Material Contract (as such term is defined in Section 2.10 hereof), which is applicable to the Company or any Subsidiary or by which the Company or any Subsidiary is bound, or constitute, with or without the passage of time and giving of notice, a default thereunder, or result in the creation or imposition of any Lien (other than the Permitted Liens) upon any assets of the Company or any Subsidiary.

Section 2.11 Material Contracts and Obligations.

The Company's Exchange Act Reports describe or include as exhibits thereto all material contracts to which the Company or any Subsidiary is a party or by which it or its property is bound which are required to be disclosed pursuant to Item 601 of Regulation S-K (each of the foregoing, a "Material Contract").

ARTICLE 3. REPRESENTATIONS AND WARRANTIES OF THE PURCHASER

The Purchaser hereby represents and warrants to the Company that:

Section 3.1 Organization, Good Standing and Qualification; Authority. The

Purchaser is a corporation duly organized, validly existing and in good standing under the laws of the State of Washington and has all requisite corporate power and authority to carry on its business as presently conducted and carry out the transactions contemplated hereunder. The Purchaser is duly qualified to transact business and is in good standing in each jurisdiction in which it conducts its business or where it is required to be so qualified except in such jurisdictions in which the failure so to qualify would not have a material adverse effect on its business, assets, operation, condition (financial or otherwise) or prospects. The Purchaser possesses all requisite corporate power and authority to own and operate its properties and to carry on its business as now conducted and as proposed to be conducted. The Purchaser has the requisite corporate power and authority to execute and deliver this Agreement and the Warrant and to perform its obligations hereunder and thereunder and, to the extent applicable, has taken all corporate or other actions with respect to the execution and delivery of this Agreement and the Warrant and has duly executed and delivered this Agreement and Warrant pursuant to all necessary corporate action or other necessary actions. This Agreement and the Warrant constitute legal, valid and binding obligations of the Purchaser enforceable against the Purchaser in accordance with their terms, except as such enforceability may be limited by bankruptcy or similar laws affecting the rights of creditors generally and by the availability of equitable remedies.

Section 3.2 No Consents. No consent, approval, order of authorization of,

or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority other than any state securities authorities on the part of such Purchaser is required in connection with the consummation of the transactions contemplated hereby or by the Note and the Warrant.

Section 3.3 No Conflicts. Neither the authorization, execution and

delivery of this Agreement or the Warrant, the consummation of the transactions herein and therein contemplated, nor the fulfillment of or compliance with the terms hereof and thereof, will conflict with or result in a breach of any of the terms of the charter, bylaws or other corporate restriction, or of any statute, law, rule or regulation, or of any judgment, decree, writ, injunction, order or award of any arbitrator, court or governmental or regulatory authority, or of any Material Contract, which is applicable to the Purchaser or any subsidiary thereof or by which the Purchaser or any subsidiary thereof is bound, or constitute, with or without the passage of time and giving of notice, a default thereunder, or result in the creation or imposition of any lien upon any assets of the Purchaser or any subsidiary thereof.

Section 3.4 Investment Representations.

3.4.1 The Purchaser understands that, upon issuance of the Securities, the Company will place a stop-transfer order in its stock books or direct its transfer agent to place such an order in its books respecting transfer of such securities and that the certificates representing such securities shall bear the legends set forth in Section 3.5 hereof.

3.4.2 The Purchased Securities will be acquired by the Purchaser for its own account for investment purposes only, not as a nominee or agent and not with a view to the public resale or distribution thereof within the meaning of the Securities Act.

3.4.3 The Purchaser, together with its officers, tax or legal advisors (the "Purchaser Representatives"), has experience as an investor in securities of companies such as the Company and acknowledges that it is able to fend for itself, can bear the economic risk of its investment in the Purchased Securities and, together with the Purchaser Representatives, has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of such investment. Further, the Purchaser is an "accredited investor" within the meaning of Rule 501 of Regulation D promulgated under the Securities Act.

3.4.4 The Purchaser understands that the Purchased Securities constitute "restricted securities" under the Securities Act inasmuch as they are being acquired from the Company in a transaction not involving a public offering within the meaning of the Securities Act and are exempt from registration thereunder, and that under the Securities Act may be resold without registration under the Securities Act only in certain limited circumstances. In this connection, the Purchaser represents that the Purchaser is familiar with Rule 144 promulgated under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

3.4.5 The Purchaser has made an independent evaluation of the risks and merits of acquiring the Purchased Securities and the Purchaser, together with the Purchaser Representatives, has been given the opportunity to ask questions, and has asked such questions as the Purchaser has deemed necessary and appropriate concerning the Company in connection with the Purchaser's acquisition of the Purchased Securities and has had any such questions answered to its satisfaction.

Section 3.5 Legends.

It is understood that the certificate(s) representing the Note and Warrant may bear the following legend and any legend required by the laws of any state:

"The Securities evidenced hereby have not been registered under the Securities Act of 1933 (the "Act") or under any applicable state law and may not be transferred, sold or otherwise disposed of except in accordance with this [Note/Warrant] and in the absence of an effective registration under the Act or an opinion of counsel reasonably satisfactory to the issuer that such registration is not required under the Act and the rules and regulations promulgated thereunder or such state securities laws. The Securities evidenced hereby are subject to the provisions of a Standstill and Confidentiality Agreement, dated March 16, 1998, among Chrysalis International Corporation, PanLabs International, Inc. and MDS Inc., a copy of which is on file at the Office of the Secretary of Chrysalis International Corporation."

ARTICLE 4. CONDITIONS OF THE PURCHASER'S OBLIGATIONS AT THE CLOSING.

Section 4.1 The obligations of the Purchaser to purchase the Note and the

Warrant pursuant to Article 1 of this Agreement are subject to the fulfillment on or before the Closing Date of each of the following conditions:

4.1.1 The representations and warranties of the Company contained in Article 2 of this Agreement shall be true on and as of the Closing Date with the same effect as though such representations and warranties had been made on and as of the Closing Date.

4.1.2 The Company shall have performed and complied with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing Date.

4.1.3 The Company's chief executive officer shall have delivered to the Purchaser at the Closing a certificate, dated the Closing Date, certifying that the conditions specified in Sections 4.1.1 and 4.1.2 have been fulfilled.

4.1.4 The Company and the Purchaser shall have entered into a warrant agreement in form and substance as set forth in Exhibit B attached hereto (the "Warrant Agreement") and the Warrant Agreement shall be in full force and effect as of the Closing Date.

4.1.5 The Company and the Purchaser shall have entered into a standstill and confidentiality agreement in form and substance as set forth in Exhibit C attached hereto (the "Standstill Agreement"), and the Standstill Agreement shall be in full force and effect as of the Closing Date.

4.1.6 At the Closing, the Company shall execute and deliver to Purchaser a security agreement in form and substance as set forth in Exhibit D attached hereto (the "Security Agreement"), and the Security Agreement shall be in full force and effect as of the Closing Date.

4.1.7 The Company shall have delivered to the Purchaser:

(a) The Certificate of Incorporation of the Company, as amended and in effect as of the Closing Date, certified by the Secretary of State of the State of Delaware;

(b) By-laws of the Company, certified by its Secretary or Assistant Secretary as of the Closing Date; and

(c) Resolutions of the Board of Directors of the Company, authorizing and approving all matters in connection with this Agreement and the transactions contemplated hereby, certified by the Secretary or Assistant Secretary of the Company as of the Closing Date.

4.1.8 At the Closing Date, the purchase of the Securities by the Purchaser hereunder shall be legally permitted by all statutes, laws, rules and regulations to which the Purchaser and the Company are subject.

4.1.9 All corporate and other proceedings in connection with the transactions contemplated hereby and all documents and instruments incident thereto shall be satisfactory in form and substance to the Purchaser. The Purchaser shall have received all such counterpart original and certified or other copies of such documents as it may request.

Section 4.2 Waiver of Conditions.

Any of the conditions specified in Section 4.1 may be waived by the Purchaser in writing.

ARTICLE 5. CONDITIONS OF THE COMPANY'S OBLIGATIONS AT THE CLOSING.

Section 5.1 The obligations of the Company to sell the Note and Warrant to

the Purchaser pursuant to Article 1 of this Agreement are subject to the fulfillment on or before the Closing Date of each of the following conditions:

5.1.1 The representations and warranties of the Purchaser contained in Article 3 hereof shall be true on and as of the Closing Date with the same effect as though such representations and warranties had been made on and as of the Closing Date.

5.1.2 At the time of the Closing, the purchase of the Securities hereunder by the Purchaser shall be legally permitted by all Laws to which the Purchaser is subject.

5.1.3 The Company and the Purchaser shall have entered into the Warrant Agreement, and the Warrant Agreement shall be in full force and effect as of the Closing Date.

5.1.4 The Company and the Purchaser shall have entered into the Standstill Agreement, and the Standstill Agreement shall be in full force and effect as of the Closing Date.

Section 5.2 Waiver of Conditions.

Any of the conditions set forth in Section 5.1 may be waived by the Company in writing.

ARTICLE 6. AFFIRMATIVE COVENANTS OF THE COMPANY.

The Company covenants and agrees that, so long as the Note shall remain outstanding:

Section 6.1 Ranking of and Securitization of the Note. The Note is, and

shall remain, a secured obligation of the Company subordinate only to the Senior Indebtedness and, in the case of Corestates Bank, N.A. ("Corestates"), the terms and conditions of subordination of the Senior Indebtedness to Corestates are set forth in the Subordination Agreement, dated March 16, 1998, by and among, the Company, the Purchaser and Corestates. The Indebtedness of the Company under the Note shall be secured by a valid, perfected, security interest in all the Company's presently owned and after-acquired personal property (tangible and intangible) and fixtures (the "Collateral"). The Purchaser's security interest in the Collateral created in favor of the Purchaser (and evidenced by the Security Agreement) shall be a second priority security interest, subordinate only to the Permitted Liens. The Company shall execute such UCC-1 financing statements and take such other steps as the Purchaser shall require to perfect

the Purchaser's second priority security interest in the Collateral.

Section 6.2 Public Information; Commission and Nasdaq Filings; Reports.

6.2.1 The Company shall timely file all Exchange Act Reports and Nasdaq Reports (or, if the Company is not required to file such reports, it will, upon the request of the Purchaser, make publicly available such other information), and it shall take such further action as the Purchaser may reasonably request, all to the extent required from time to time to enable the Purchaser, subject to any restrictions contained in the Standstill Agreement, to sell securities to the public without restriction under the Securities Act within the limitation of the exemptions provided by (a) Rule 144 under the Securities Act, as such Rule may be amended from time to time, or (b) any similar rule or regulation

7

hereafter adopted by the Commission. Upon written request of the Purchaser, the Company will deliver to the Purchaser a written statement as to whether it has complied with such requirements.

6.2.2 The Company shall deliver to the Purchaser, (i) simultaneously with its filing, all Exchange Act Reports and Nasdaq Reports filed with the Commission and/or Nasdaq, and (ii) simultaneously with its mailing to its stockholders, all reports, proxy statements, financial statements and other communications delivered or sent by the Company to its stockholders in such capacity or by any Subsidiary to its stockholders other than the Company.

Section 6.3 Notice of Certain Events. The Company will provide the

Purchaser with written notification promptly, but in any event not later than ten Business Days, after any officer of the Company becomes aware of the occurrence of any of the following events:

6.3.1 The Company or any Subsidiary shall have become a party to one or more suits, actions or proceedings which, if adversely determined, could have a material adverse effect on the business, assets, operations, condition (financial or otherwise) or prospects of the Company and the Subsidiaries taken as a whole;

6.3.2 Any condition or event which constitutes or which, with notice or lapse of time, would constitute an Event of Default shall have occurred;

6.3.3 The Company or any Subsidiary has received notice of any default or failure to perform any covenant or failure to maintain any representation or warranty by the Company or such Subsidiary under any agreement relating to Indebtedness for money borrowed to which the Company or such Subsidiary its a party;

6.3.4 Any condition shall exist which has resulted in or which is likely, in the reasonable judgment of the Company, to result in an material adverse change in the business, assets, operations, condition (financial or otherwise) or prospects of the Company and the Subsidiaries taken as a whole or the ability of the Company to perform its obligations hereunder or under the Note or the Warrant.

Section 6.4 Exchanges; Lost; Stolen or Mutilated Certificates.

Upon surrender by the Purchaser to the Company of any certificate representing any of the Purchased Securities, the Company at its expense will issue in exchange therefor, and deliver to the Purchaser, a new certificate or certificates representing such Purchased Securities, in such denomination or denominations as may be requested by the Purchaser. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of any certificate representing any of the Purchased Securities, and in case of any such loss, theft or destruction, upon delivery of an indemnity agreement satisfactory to the Company, or in case of any such mutilation, upon surrender and cancellation of such certificate, the Company at its expense will issue and deliver to the Purchaser a new certificate for such Purchased Securities, of like tenor, in lieu of such lost, stolen or mutilated certificates.

ARTICLE 7. NEGATIVE COVENANTS OF THE COMPANY.

The Company covenants and agrees that, so long as the Note shall be outstanding:

Section 7.1 The Company will not, and will not permit any Subsidiary to,

directly or indirectly, create, incur, issue, purchase, assume, guaranty or become liable with respect to, contingently or otherwise, or extend the maturity of, any Indebtedness, except: (a) the Indebtedness evidenced by the Note; (b) the Senior Indebtedness; (c) Indebtedness which is junior in right of payment to the

8

Company's Indebtedness to the Purchaser; and (d) any amendment, extension, renewal or refinancing of the Senior Indebtedness, provided that the aggregate unpaid principal and accrued interest of such Senior Indebtedness, after such amendment, extension, renewal or refinancing, does not exceed \$10,000,000 in the aggregate, and further provided, that, in the case of any refinancing of the Senior Indebtedness, the proceeds or a portion of such proceeds of such refinancing shall be used to pay-off and discharge in full the Company's indebtedness to Corestates Bank, N.A. and, if such refinancing is obtained from Persons other than the Current Lenders, such other Person(s) shall be a bank or other financial institution regularly engaged in the business of lending money.

Section 7.2 Liens. The Company will not, and will not permit any of its

Subsidiaries to, create, incur, assume or permit to exist any Lien upon any of the property or assets of any character now owned or hereafter acquired by it or on any income or rights in respect of any thereof, except: (a) any Lien created to secure the Senior Indebtedness hereto, and (b) any Lien originally created to secure payment of a portion of the purchase price or construction costs, as the case may be, relating to any real property or equipment or any interest therein, may be created and suffered to exist upon such real property, equipment or interest therein, which the Company or any Subsidiary acquired or the improvements to which are completed not more than 60 days prior to the date of the creation of the Lien, provided that such Lien does not spread to any other asset at any time owned by the Company or any subsidiary ("Purchase Money Indebtedness").

ARTICLE 8. MUTUAL COVENANTS.

It is the intention of the Parties to investigate and explore potential

additional business opportunities or agreements between them, including, but not limited to strategic alliances, joint ventures, collaborative business efforts and other arrangements. Each Party hereby covenants and agrees to cooperate in discussions as between the Parties and their respective consultants and legal counsel and, subject to the provisions of the Standstill Agreement, to provide such information and documentation as may be reasonably required by the other Party so as to foster such discussions and negotiations.

ARTICLE 9. DEFINITIONS.

Except as otherwise specified or as to the context may otherwise require, the following terms shall have the respective meanings set forth below whenever used in this Agreement:

"Affiliate" and "Associate" shall have the respective meanings ascribed to

such terms in Rule 12b-2 of the General Rules and Regulations under the Exchange Act.

"Business Day" shall mean any day other than a Saturday, Sunday or any

other day on which commercial banks are authorized to closed in Delaware.

"Capitalized Leases" shall mean, with respect to any Person, any lease or

any other agreement for the use of property which, in accordance with generally accepted accounting principles, should be capitalized on the lessee's or user's balance sheet.

"Code" shall mean the Internal Revenue Code of 1986, as amended, as the

same shall be in effect from time to time.

"Commission" shall mean the Securities and Exchange Commission and any

other similar or successor agency of the federal government administering the Securities Act or the Exchange Act.

"Current Lenders" shall mean (i) Corestates Bank, N.A., 370 Scotch Road,

West Trenton, New Jersey 08628, (ii) PNC Bank, National Association, P.O. Box 231, Scranton, Pennsylvania 18501, (iii) Pennsylvania Industrial Development Authority, Department of Commerce, 480 Forum Building, Harrisburg, Pennsylvania 17120 and (iv) Luzerner Kantonalbank, Pilatusstrasse 12, Luzern, CH-6002, Switzerland.

"Events of Default" shall have the meaning given to such term in the Note.

"Exchange Act" shall mean the Securities Exchange Act of 1934, and any

similar or successor federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Indebtedness" means, without duplication, with respect to any Person, as

of any date, the principal of and any premium or interest on (a) all indebtedness of such Person for borrowed money (including all indebtedness evidenced by notes, bonds, debentures or other securities sold by such Person for money) or in respect of letters of credit issued for its own account, (b) all indebtedness incurred by such Person in the acquisition (whether by way of purchase, merger, consolidation or otherwise and whether by such Person or another Person) of any business, real property or other assets (except assets acquired in the ordinary course of the conduct of the acquiror's usual business), (c) all Capitalized Leases, (d) guarantees by such Person of indebtedness described in clauses (a), (b) or (c), and (e) renewals, extensions, refundings, deferrals, restructurings, amendments and modifications of any such indebtedness, obligation or guarantee.

"Lien" shall mean: (i) any interest in property (whether real, personal or

mixed and whether tangible or intangible) which secures an obligation owed to, or a claim by, a Person other than the owner of such property, whether such interest is based on the common law, statute or contract, including, without limitation, any such interest arising from a Capitalized Lease, arising from a mortgage, charge, pledge, security agreement, conditional sale, trust receipt or deposit in trust, or arising from a consignment or bailment given for security purposes (ii) any encumbrance upon such property which does not secure such an obligation, and (iii) any exception to or defect in the title to or ownership interest in such property, including, without limitation, reservations, rights of entry, possibilities of reverter, encroachments, easements, rights of way, restrictive covenants, licenses and profits a prendre. For purposes of this
----- - -----

Agreement, the Company or a Subsidiary shall be deemed to be the owner of any property which it has acquired or holds subject to a Capitalized Lease or conditional sale agreement or other similar arrangement pursuant to which title to the property has been retained by or vested in some other person for security purposes.

"Permitted Liens" shall mean the Liens permitted under Section 7.2 of this

Agreement, which includes the Liens created to secure the Senior Indebtedness (Section 7.2(a)).

"Person" shall mean any natural person, corporation, limited liability

company, partnership (general or limited), association, joint venture, trust, estate or other entity.

"Securities Act" shall mean the Securities Act of 1933, as amended, and any

similar or successor federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect from time to time.

"Senior Indebtedness" means: (i) all Indebtedness of the Company for money

now borrowed from (a) Corestates Bank, N.A., 370 Scotch Road, West Trenton, New Jersey, (b) PNC Bank, National Association, P.O. Box 231, Scranton, Pennsylvania 18501, (c) Pennsylvania Industrial Development Authority, Department of Commerce, 480 Forum Building, Harrisburg, Pennsylvania 17120 and (c) Luzerner Kantonalbank, Pilatusstrasse 12, Luzern, CH-6002, Switzerland, totaling as of the date of this

Agreement, inclusive of outstanding principal, accrued interest, penalties and premiums, approximately \$10,748,000 (US Dollars); (ii) any amendment, extension, renewal or refinancing of the Indebtedness described in subsection (i) hereof, provided that the aggregate principal and interest of such Indebtedness does not exceed \$10,000,000, and subject to the additional limitations of Section 7.1(d) of this Agreement; and (iii) Purchase Money Indebtedness, but only the amount

equal to the lesser of (x) the principal amount borrowed and (y) the fair value

of the equipment acquired or the construction costs incurred, as the case maybe, as of the date of the borrowing.

"Subsidiary" means any Person of which at the time of determination made

under this Agreement at least a majority of capital stock having ordinary voting power for the election of directors or other governing body of such person is owned by the Company directly or through one or more Subsidiaries.

ARTICLE 10. MISCELLANEOUS.

Section 10.1 Survival of Warranties. The warranties, representations and

covenants of the Company contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be effected by any investigation of the subject matter thereof made by or on behalf of the Purchaser.

Section 10.2 Successors and Assigns. The terms and conditions of this

Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties. Nothing in this Agreement, express or implied, is intended to confer upon any Person other than the Parties or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

Section 10.3 Governing Law. This Agreement shall be shall be deemed to

be a contract made under the laws of the State of Delaware and for all purposes shall be construed in accordance with the laws of said State without giving effect to the rules of said State governing the conflicts of laws.

Section 10.4 Counterparts. This Agreement may be executed in two or more

counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Section 10.5 Titles and Subtitles. The titles and subtitles used in this

Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

Section 10.6 Notices. All notices, requests, demands, claims, deliveries

and other communications hereunder shall be given in writing and shall be deemed effectively given upon (a) personal delivery to the Person to be notified (b) seven days after deposit with a domestic Post Office, by registered mail, postage prepaid and addressed to the Person to be notified at the address

indicated for such Person below, or at such other address as such Person may designate by advance written notice to the other Party, (c) confirmed transmission by electronic facsimile to the fax number specified for such Person below or such other number as such Person may designate by advance written notice to the other Party, (d) two business days after sent by certified mail (first class, postage prepaid) and addressed to the Person to be notified at the address indicated for such Person below, or at such other address as such Person may designate by advance written notice to the other Party or (e) next day for delivery by guaranteed overnight delivery, which deliver is confirmed:

<TABLE>

<S>

(1) If to the Company, to:

Chrysalis International Corporation
575 Route 28
Raritan, New Jersey 08869
Fax: (908) 722-6677
Attention: John Cooper

<C>

With a copy to:

Jones, Day, Reavis & Pogue
North Point, 901 Lakeside Avenue
Cleveland, Ohio 44114
Fax: (216) 579-0212
Attention: Thomas C. Daniels, Esq.

(2) If to the Purchaser, to:

PanLabs International, Inc.
c/o MDS Inc.
100 International Boulevard
Etobicoke, Ontario, Canada M9W 6J6
Fax: (416) 675-4095
Attention: Vice President, Legal Affairs

With a copy to:

Harris Beach & Wilcox, LLP
130 East Main Street
Rochester, New York 14604
Fax: (716) 232-6925
Attention: Thomas E. Willett, Esq.

</TABLE>

Section 10.7 Expenses. The Company and the Purchaser shall bear their

own expenses incurred on their respective behalves with respect to the negotiation, execution and delivery of this Agreement.

Section 10.8 Entire Agreement, Amendment.

10.8.1 This Agreement (including the Exhibits and Schedules hereto) and the Note, the Warrant Agreement and the Standstill Agreement constitute the full and entire understanding and agreement between the Parties with regard to the subjects hereof and thereof.

10.8.2 Any term of this Agreement may be amended, waived or discharged (either generally or in a particular instance and either retroactively or prospectively), by a written instrument signed by the Company and the Purchaser.

Section 10.9 Brokers. Each of the Company and the Purchaser (a)

represents and warrants to each other that such Person has retained no finder or broker in connection with the transactions contemplated by this Agreement, and (b) will indemnify and save the other harmless from and against any and all claims, liabilities or obligations with respect to brokerage or finders fees or commissions, or consulting fees in connection with the transactions contemplated by this Agreement asserted by any Person on the basis of any statement or representation alleged to have been made by such indemnifying

Party.

Section 10.10 Severability. If one or more provisions of this Agreement

are held to be unenforceable under applicable Law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its term.

Section 10.11 Publicity. Except to the extent any public disclosure is

required by law, the Company and the Purchaser shall consult with, and obtain the prior approval of (which approval shall not be unreasonably withheld) the other Party with respect to any proposed press release announcing this Agreement or with respect to any future press releases or public statements with respect to the transactions contemplated hereby and in making any filings with the Commission or Nasdaq prior to their release or filing.

12

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first above written.

PANLABS INTERNATIONAL, INC.

By: /s/ Peter E. Brent

Name: Peter E. Brent

Title: Director and Assistant Secretary

CHRYSALIS INTERNATIONAL CORPORATION

By: /s/ John G. Cooper

Name: John G. Cooper

Title: Senior Vice President and Chief
Financial Officer

13

CHRYSALIS INTERNATIONAL CORPORATION
6% SUBORDINATED NOTE DUE MARCH 16, 2001

\$5,000,000

DATED MARCH 16, 1998

THIS NOTE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") OR UNDER ANY APPLICABLE STATE LAW AND MAY NOT BE TRANSFERRED, SOLD OR OTHERWISE DISPOSED OF EXCEPT IN ACCORDANCE WITH THIS NOTE AND IN THE ABSENCE OF EFFECTIVE REGISTRATION UNDER THE ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER OR SUCH STATE SECURITIES LAW. THIS NOTE IS SUBJECT TO THE PROVISIONS OF A SUBORDINATION AGREEMENT, DATED MARCH 16, 1998, AMONG CHRYSALIS INTERNATIONAL CORPORATION, PANLABS INTERNATIONAL, INC. AND CORESTATES BANK, N.A. (THE "SUBORDINATION AGREEMENT"), A COPY OF WHICH IS ON FILE AT THE OFFICE OF THE SECRETARY OF CHRYSALIS INTERNATIONAL CORPORATION.

FOR VALUE RECEIVED, CHRYSALIS INTERNATIONAL CORPORATION, a New Jersey corporation (the "Company"), with offices at 575 Route 28, Raritan, New Jersey 08869, hereby promises to pay, at the time and in the manner set forth below, with interest at the rate of six percent (6%) per annum, payable semi-annually, in arrears, on September 16 and March 16 of each year, beginning on September 16, 1998 to the order of PANLABS INTERNATIONAL, INC. (the "Payee"), at c/o MDS INC., 100 International Boulevard, Etobicoke, Ontario, Canada M9W 6J6 or at such other office as the Payee designates in writing to the Company, the principal amount of Five Million Dollars (\$5,000,000). All payments under this Note shall be made in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts. The aforesaid principal amount shall be due, together with all accrued and unpaid interest, on March 16, 2001 or on such earlier date (in either case, the "Maturity Date") on which the principal amount shall become due in accordance with the terms of this Note.

This Note is issued under and pursuant to a Note and Warrant Purchase Agreement (the "Purchase Agreement") dated this date, to which reference is herewith made, between the Company and the Payee. "Note" as used herein means the note issued under the Purchase Agreement and all other terms, when capitalized in this Note, unless otherwise expressly defined herein, shall have the same meaning and effect as set forth in the Purchase Agreement.

ARTICLE I
PREPAYMENT

The Company may at any time, without penalty, prepay in whole or in part, the principal outstanding under this Note or any accrued and unpaid interest thereon; provided the Company shall provide the Payee with written notice of its intention to make such a prepayment 60 calendar days prior to the

date of such prepayment.

ARTICLE II
SUBORDINATION

The Company agrees, and the Payee by its acceptance of this Note likewise agrees, that the payment of the principal of and interest on this Note is subordinated and junior in right of payment, with respect to the subordination of the Senior Indebtedness of Corestates Bank, N.A. ("Corestates"), to the extent and in the manner provided in the Subordination Agreement and, with respect to the subordination of the holders of all other Senior Indebtedness, to the extent and in the manner provided in this Article, to the prior payment in full of all Senior Indebtedness.

2.1 Company Not to Make Payments with Respect to Note in Certain

Circumstances. No payment shall be made by the Company on account of principal

of or interest on this Note if there shall have occurred

and be continuing a default with respect to the payment of any Senior Indebtedness and (a) such default is the subject of a judicial proceeding or (b) notice of such default in writing has been given to the Company by any holder or holders of any Senior Indebtedness unless and until such default or event of default shall have been cured or waived or shall have ceased to exist.

Upon any acceleration of the principal of this Note or any payment by the Company, or distribution of assets of the Company of any kind or character, whether in cash, property or securities, to creditors upon any dissolution or winding up or liquidation or reorganization of the Company, whether voluntary or involuntary, or in bankruptcy, insolvency, receivership or other proceedings, all amounts due or to become due upon all Senior Indebtedness shall first be paid in full, or payment thereof provided for, before any payment is made on account of the principal of or interest on this Note; and (subject to the power of a court of competent jurisdiction to make other equitable provision, which shall have been determined by such court to give effect to the rights conferred in this Article upon the Senior Indebtedness and the holders thereof with respect to this Note or the Payee, by a lawful plan of reorganization or readjustment under applicable law) upon any such dissolution or winding up or liquidation or reorganization, any payment by the Company, or distribution of assets of the Company of any kind or character, whether in cash, property or securities, to which the Payee would be entitled except for the provisions of this Article II, shall be paid by the Company or by any receiver, trustee in bankruptcy, liquidating trustee, agent or other person making such payment or distribution directly to the holders of Senior Indebtedness, as their respective interests may appear, to the extent necessary to pay all Senior Indebtedness in full, after giving effect to any concurrent payment of distribution to or for the holders of Senior Indebtedness, before any payment of distribution is made to the Payee.

The consolidation of the Company with, or the merger of the Company into, another corporation or the liquidation or dissolution of the Company following the conveyance or transfer of its property as an entirety, or substantially as an entirety, to another corporation shall not be deemed a dissolution, winding up, liquidation or reorganization for the purposes of this Article.

2.2. Subrogation of Note. Subject to the payment in full of all

amounts then due (whether by acceleration of the maturity thereof or otherwise) on account of the principal of and interest on all Senior Indebtedness at the time outstanding, the Payee shall be subrogated to the rights of the holders of Senior Indebtedness to receive payments or distributions of cash, property or securities of the Company applicable to the Senior Indebtedness until the principal of (and premium, if any) and interest on this Note shall be paid in full; and, for the purposes of such subrogation, no payments or distributions to the holders of Senior Indebtedness of any cash, property or securities to which the Payee would be entitled except for the provisions of this Article, and no payments over to the holders of Senior Indebtedness by the Payee, shall, as between the Company, its creditors other than holders of Senior Indebtedness, and the Payee, be deemed to be a payment by the Company to or on account of the Senior Indebtedness. It is understood that the provisions of this Article are and are intended solely for the purpose of defining the relative rights of the Payee, on the one hand, and the holders of Senior Indebtedness, on the other hand. Contrary provisions herein notwithstanding, as between the Payee and Corestates, the subrogation rights of Payee shall not entitle the Payee to any priority over Corestates as to payments or distributions of cash, property or securities of the Company distributed to Corestates which Corestates is subsequently required to disgorge, return or otherwise pay-over pursuant to applicable fraudulent conveyance laws.

Nothing contained in this Article or elsewhere in this Note is intended to or shall impair, as among the Company, its creditors other than the holders of Senior Indebtedness, and the Payee, the obligation of the Company, which is absolute and unconditional, to pay to the Payee the principal of and interest on this Note as and when the same shall become due and payable in accordance with its terms, or is intended to or shall affect the relative rights of the Payee and creditors of the Company other than the holders of Senior Indebtedness, nor shall anything herein or therein prevent the Payee from exercising all remedies otherwise permitted by applicable law upon default under this Note, subject to the rights, if any, under this Article of the

holders of Senior Indebtedness in respect of cash, property or securities of the Company received upon the exercise of any such remedy.

Upon any payment or distribution of assets of the Company referred to in this Article, the Payee shall be entitled to rely upon any order or decree made by any court of competent jurisdiction in which such dissolution, winding

up, liquidation or reorganization proceedings are pending, or certificate of the receiver, trustee in bankruptcy, liquidating trustee, agent or other person making such payment or distribution, delivered to the Payee for the purpose of ascertaining the persons entitled to participate in such distribution, the holders of Senior indebtedness and other indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article.

2.3 Undertaking. By its acceptance of this Note, the Payee agrees to

execute and deliver such documents as may be reasonably requested from time to time by the Company or the lender of any Senior Indebtedness in order to implement the foregoing provisions of this Article II.

2.4. Article Not To Prevent Events of Default. The failure to make a

payment on account of principal of or interest on this Note by reason of any provision in this Article II shall not be construed as preventing the occurrence of an Event of Default.

ARTICLE III
EVENTS OF DEFAULT

At the option of the Payee and without prejudice to any other rights the Payee may have at law or in equity, all sums of principal and interest then remaining unpaid hereon shall immediately and automatically become due and payable without demand, presentment or notice, all of which hereby are expressly waived, or any other action on the part of the Payee, if any of the following occurs ("Events of Default"):

3.1. Breach of Covenants. The Company breaches any covenant or other

term of this Note, or Article 6 or Article 7 of the Purchase Agreement; provided that a breach of a covenant set forth in Article 6 shall not become an Event of Default until five days after written notice thereof to the Company from the Payee.

3.2 Breach of Representations and Warranties. Any of the

representations or warranties of the Company or any Subsidiary made to the Payee in the Purchase Agreement is or becomes false or misleading in any material respect as if such representations and warranties were made as of the date hereof.

3.3. Insolvency; Appointments of Receiver or Trustee. The Company

becomes insolvent or admits in writing its inability to pay its debts as they mature; makes an assignment for the benefit of creditors; applies for or consents to the appointment of a receiver or trustee for it or for a substantial part of its property or business; or such a receiver or trustee otherwise is appointed and any such receivership or trusteeship shall remain undischarged for

a period of 60 days.

3.4. Judgments. Any final judgment or judgments for an amount or

amounts in excess of \$500,000 in the aggregate is entered against the Company or any of its property or other assets and remains un-vacated, unbonded or unstayed for a period of ten days or in any event later than five days prior to the date of any proposed sale thereunder.

3.5. Bankruptcy. Bankruptcy, insolvency, reorganization or

liquidation proceedings or other proceedings or relief under any bankruptcy law or any law for the relief of debtors is instituted by the Company, or against the Company, and any such involuntary proceeding shall remain undismissed for a period of 60 days or the Company by any act indicates its consent to, approval of, or acquiescence in, any such proceeding.

3

3.6. Attachments. Any material writ of attachment is levied against

any property or other assets of the Company and the Company fails within five days thereafter to post a bond for the release of such attachment.

3.7. Default on Senior Indebtedness. The Company fails to pay when

due any obligation for money borrowed or defaults under any agreement involving the borrowing of money or the advance of credit with respect to the Senior Indebtedness, which results in the acceleration of the maturity of all or a portion of the Senior Indebtedness or otherwise results in the pursuit by the lender of: (i) collection of the indebtedness or (ii) remedies as a secured creditor.

3.8. Failure to Pay Note when Due. The Company fails to pay this

Note when due in accordance with its terms.

3.9. Change of Control. Upon either of the following to occur: (i)

in the event of a Change of Control transaction with a Person, other than the Payee, which is approved by the Board of Directors of the Company, the passage of 60 calendar days after the earlier of the public announcement or the execution of definitive documents with respect thereto; or (ii) in the event of a Change of Control transaction with a Person, other than the Payee, which is not approved by the Board of Directors of the Company, the passage of 60 calendar days after the consummation of such transaction.

3.10 Termination of Reporting Obligations or Listing Rights. The

Company's reporting obligations pursuant to Section 13 or 15(d) of the Exchange

Act are suspended or terminated or the Company's Common Stock is no longer traded (for any reason) on the Nasdaq National Market System, except for temporary suspensions of trading.

ARTICLE IV
DEFINITIONS

Except as otherwise specified or as to the context may otherwise require, the following terms shall have the respective meanings set forth below whenever used in this Note:

"Change of Control" shall mean: (i) any reorganization, merger or

consolidation of the Company with one or more Persons (other than the Payee) pursuant to which the Company shall not be the continuing or surviving entity of such reorganization, merger or consolidation; (ii) the transfer of all or substantially all of the assets of the Company; (iii) any transaction or transactions where any Person (other than the Payee) or "group," as defined in Rule 13d-5 of the Exchange Act, shall be the Beneficial Owner of a majority of the then outstanding shares of the Company's securities generally entitled to vote in the election of directors; or (iv) any transaction as a result of which the persons who are directors of the Company before the transaction cease to constitute a majority of the Company's Board of Directors upon consummation of the transaction.

"Beneficial Owner" A Person shall be deemed the "Beneficial Owner" of

and shall be deemed to "beneficially own" any securities in accordance with the term "beneficial ownership" as defined in Rule 13d-3 under the Exchange Act as in effect on the date hereof, and shall also include any securities which such Person or any Affiliate of such Person has the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise.

ARTICLE V
MISCELLANEOUS

5.1. Enforcement of Rights. The Company shall reimburse the Payee

for all costs and expenses incurred by the Payee and shall pay the reasonable fees and disbursements of counsel to the Payee in connection with the enforcement of the Payee's rights under this Note.

5.2. No Waiver. No amendment, modification or waiver of any

provision of this Note nor consent to any departure by the Company therefrom

shall be effective unless the same shall be in writing and signed by the Payee and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

5.3. Waiver of Notice. The Company hereby waives any requirements of -----
notice of dishonor, notice of protest and protest.

5.4. Governing Law. This Note shall be shall be deemed to be a -----
contract made under the laws of the State of Delaware and for all purposes shall be construed in accordance with the laws of said State without giving effect to the rules of said State governing the conflicts of laws.

5.5. Assignment. This Note shall be binding upon the Company and its -----
successors and assigns and the terms hereof shall inure to the benefit of the Payee and its successors and assigns, including subsequent holders hereof; provided, however, any assignee of the Payee shall be an Affiliate of the Payee.

5.6. Severability. The holding of any provision of this Note to be -----
invalid or unenforceable by a court of competent jurisdiction shall not affect any other provisions and the other provisions of this Note shall remain in full force and effect.

5.7. Captions. The caption headings of the Articles and Sections of -----
this Note are for convenience of reference only and are not intended, nor should they be construed as, a part of this Note and shall be given no substantive effect.

IN WITNESS WHEREOF, the Company, has caused this Note to be signed in its corporate name and its corporate seal to be hereunto affixed by its secretary thereunto duly authorized.

CHRYSALIS INTERNATIONAL CORPORATION

By: /s/ John G. Cooper

Name: John G. Cooper

Title: Senior Vice President and Chief
Financial Officer

ATTEST:

Name:/s/ Paul J. Schmitt

Title: Chairman of the Board of Directors
and Chief Executive Officer

5

Exhibit A

ASSIGNMENT FORM

For value received _____ hereby sell,
assign and transfer to _____ all right, title and interest
in and to the attached Note in the principal amount of \$_____, and
irrevocably appoint _____ attorney (with
full power of substitution) to transfer the Note on the books of CHRYSALIS
INTERNATIONAL CORPORATION.

Date

(Please sign exactly as name appears on Note)

Name: _____

Title: _____

6

WARRANT AGREEMENT

by and between

PANLABS INTERNATIONAL, INC.

and

CHRYSALIS INTERNATIONAL CORPORATION

Dated as of March 16, 1998

THE SECURITIES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") OR UNDER ANY APPLICABLE STATE LAW AND MAY NOT BE TRANSFERRED, SOLD OR OTHERWISE DISPOSED OF EXCEPT IN ACCORDANCE WITH THIS AGREEMENT AND IN THE ABSENCE OF AN EFFECTIVE REGISTRATION UNDER THE ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE ACT AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER OR SUCH STATE SECURITIES LAWS. THE SECURITIES EVIDENCED HEREBY ARE SUBJECT TO THE PROVISIONS OF A STANDSTILL AND CONFIDENTIALITY AGREEMENT, DATED MARCH 16, 1998, AMONG CHRYSALIS INTERNATIONAL CORPORATION, MDS INC. AND PANLABS INTERNATIONAL, INC., A COPY OF WHICH IS ON FILE AT THE OFFICE OF THE SECRETARY OF CHRYSALIS INTERNATIONAL CORPORATION.

WARRANT AGREEMENT

This WARRANT AGREEMENT (this "Warrant") is being entered into this 16th day of March 1998, by and between Chrysalis International Corporation, a

Delaware corporation (together with its successors and permitted assigns, "Chrysalis") and Panlabs International, Inc., a Washington corporation and a wholly owned subsidiary of MDS Washington, Inc., a wholly owned subsidiary of MDS Inc. (the "Investor"). Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to them in the Standstill Agreement (as defined below).

WHEREAS, Chrysalis and the Investor have entered into that Note and Warrant Purchase Agreement (the "Note and Warrant Purchase Agreement"), dated as of the date hereof, pursuant to which Chrysalis has agreed to issue to the Investor the US\$5,000,000 subordinated promissory note (the "Note") and Chrysalis has agreed to grant to the Investor the right to purchase Two Million (2,000,000) shares of Common Stock, par value \$0.01 per share, of Chrysalis ("Common Stock"), at an exercise price of \$2.50 per share pursuant to the terms and conditions of this Warrant; and

WHEREAS, Chrysalis and the Investor have entered into a Standstill and Confidentiality Agreement dated as of the date hereof (the "Standstill Agreement"), pursuant to which Chrysalis and the Investor have agreed to certain limitations on the ownership of Voting Securities and Convertible Securities, which limitations shall also apply hereto.

NOW, THEREFORE, in consideration of the agreements, rights, obligations and covenants contained herein, and other good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, Chrysalis and the Investor hereby agree as follows:

SECTION 1. GRANT OF WARRANT.

1.1 GRANT. Chrysalis hereby grants to the Investor this Warrant, which, subject to the terms and conditions of the Standstill Agreement, is exercisable as provided herein, in whole or in part as provided in Section 3.1 hereto, at any time and from time to time during the period commencing on the date hereof (the "Closing Date") and ending on the later of (i) the third anniversary of the Closing Date at 6:00 p.m., local time in New York, New York and (ii) payment by Chrysalis of the full amount of the Note (the "Exercise Period"), to purchase an aggregate of up to Two Million (2,000,000) shares of Common Stock (the "Warrant Shares"), at an exercise price of two dollars and fifty cents (US\$2.50) per share (as it may be hereinafter adjusted, the "Exercise Price").

1.2 SHARES TO BE ISSUED; RESERVATION OF SHARES. Chrysalis covenants and agrees that all Warrant Shares will, upon issuance, be duly authorized, validly issued and outstanding, fully paid and non-assessable, and free from all taxes, liens and charges with respect to the issuance thereof. Chrysalis further covenants and agrees that it will from time to time take all actions required to assure that the par value per share of the Common Stock is at all times equal to or less than the effective Exercise Price. Chrysalis further covenants and agrees that, during the Exercise Period, Chrysalis will at all times have authorized and reserved sufficient shares of Common Stock to provide

for the exercise of this Warrant in full.

SECTION 2. ADJUSTMENTS TO WARRANT RIGHTS.

2.1 STOCK COMBINATIONS. In case Chrysalis shall combine all of the outstanding Common Stock proportionately into a smaller number of shares, the Exercise Price per Warrant Share hereunder in effect immediately prior to such combination shall be proportionately increased and the number of Warrant Shares issuable to the Investor upon exercise of this Warrant shall be proportionately decreased, as of the effective date of such combination, as follows: (a) the number of Warrant Shares purchasable upon the exercise of the Warrant immediately prior to the effective date of such combination, shall be adjusted so that the holder of the Warrant exercised after that date shall be entitled to receive the number and kind of Warrant Shares which the holder of the Warrant would have owned and been entitled to receive as a result of the combination had the Warrants been exercised immediately prior to that date and (b) the Exercise Price in effect immediately prior to such adjustment shall be adjusted by multiplying such Exercise Price by a fraction, the numerator of which is the aggregate number of shares of Common Stock purchasable upon exercise of the Warrants immediately prior to such adjustment, and the denominator of which is the aggregate number of shares of Common Stock purchasable upon exercise of the Warrants immediately thereafter.

2.2 REORGANIZATIONS. If any of the following transactions (each, a "Special Transaction") shall become effective after the Closing Date: (i) a capital reorganization or reclassification of the capital stock of Chrysalis, (ii) a consolidation or merger of Chrysalis with and into another entity and Chrysalis is not the surviving entity in such transaction, or (iii) a sale or conveyance of all or substantially all of the assets of Chrysalis, then, as a condition of any such Special Transaction, lawful and adequate provision shall be made whereby the Investor shall thereafter have the right to purchase and receive, at any time after the consummation of such

Special Transaction until the expiration of the Exercise Period, upon the basis and upon the terms and conditions specified herein, and in lieu of the Warrant Shares immediately theretofore issuable upon exercise of this Warrant for the aggregate Exercise Price in effect immediately prior to such consummation, such shares of stock, other securities, cash or other assets as may be issued or payable in and pursuant to the terms of such Special Transaction with respect to or in exchange for a number of outstanding shares of Common Stock equal to the number of Warrant Shares immediately theretofore issuable upon exercise of this Warrant had such Special Transaction not taken place (pro rated in the case of any partial exercises). In connection with any Special Transaction, appropriate provision shall be made with respect to the rights and interests of the Investor to the end that the provisions of this Warrant (including without limitation provisions for adjustment of the Exercise Price and the number of Warrant Shares issuable upon the exercise of the Warrant), shall thereafter be applicable, as nearly as may be, to any shares of stock, other securities, cash or other assets thereafter deliverable upon the exercise of this Warrant.

2.3 ADJUSTMENT UPON CHANGES IN CAPITALIZATION. In the event of any change in the Common Stock by reason of stock dividends, stock splits, recapitalizations or reclassifications, the type and number of Warrant Shares issuable upon exercise of this Warrant, and the Exercise Price, as the case may be, shall be adjusted as follows: (a) the number of Warrant Shares purchasable upon the exercise of the Warrant immediately prior to the record date for such dividend or distribution, or the effective date of such recapitalization or reclassification shall be adjusted so that the holder of the Warrant exercised after that date shall be entitled to receive the number and kind of Warrant Shares which the holder of the Warrant would have owned and been entitled to receive as a result of the dividend, distribution, recapitalization or reclassification had the Warrants been exercised immediately prior to that date and (b) the Exercise Price in effect immediately prior to such adjustment shall be adjusted by multiplying such Exercise Price by a fraction, the numerator of which is the aggregate number of shares of Common Stock purchasable upon exercise of the Warrants immediately prior to such adjustment, and the denominator of which is the aggregate number of shares of Common Stock purchasable upon exercise of the Warrants immediately thereafter. No such adjustment shall be made on account of any dividend payable other than in securities of Chrysalis.

2.4 NOTICE. Whenever this Warrant or the number of Warrant Shares issuable hereunder is to be adjusted as provided herein or a dividend or distribution (in cash, stock or otherwise and including, without limitation, any liquidating distributions) is to be declared by Chrysalis, Chrysalis shall forthwith cause to be sent to the Investor at the last address of the Investor shown on the books of Chrysalis, by first-class mail, postage prepaid, at least 10 days prior to the record date specified below, a notice stating in reasonable detail the relevant facts and any resulting adjustments and the calculation thereof, if applicable, and stating (if applicable): that the date to be used to determine (i) which holders of Common Stock will be entitled to receive notice of such dividend, distribution, subdivision or combination (the "Record Date") and (ii) the date as of which such dividend distribution, subdivision or combination shall be made; or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, subdivision or combination are to be determined (provided, that in the event Chrysalis institutes a policy of declaring cash dividends on a periodic basis, Chrysalis need only provide the relevant information called for in this clause with respect to the

first cash dividend payment to be made pursuant to such policy and thereafter provide only notice of any changes in the amount or the frequency of any subsequent dividend payments).

2.5 FRACTIONAL INTERESTS. Chrysalis shall not be required to issue fractions of shares of Common Stock on the exercise of this Warrant. If any fraction of a share of Common Stock would, except for the provisions of this Section 2.5, be issuable upon the exercise of this Warrant, Chrysalis shall, upon such issuance, purchase such fraction for an amount in cash equal to the current value of such fraction, computed on the basis of the last, reported

close price of the Common Stock on the National Association of Securities Dealers Automated Quotation System ("Nasdaq") on the last business day prior to the date of exercise upon which such a sale shall have been effected, or, if the Common Stock is not so quoted on Nasdaq, as the Board of Directors of Chrysalis may in good faith determine.

2.6 EFFECT OF ALTERNATE SECURITIES. If at any time, as a result of an adjustment made pursuant to this Section 2, the holder of the Warrants shall thereafter become entitled to receive any securities of Chrysalis other than shares of Common Stock, then the number of such other securities receivable upon exercise of the Warrant shall be subject to adjustment from time to time on terms as nearly equivalent as practicable to the provisions with respect to shares of Common Stock contained in this Section 2.

SECTION 3. EXERCISE OF WARRANT.

3.1 EXERCISE OF WARRANT. (a) The Investor may exercise this Warrant in whole or in part; provided, however, that if the Investor exercises this

Warrant in part it must do so in increments of 500,000 Warrant Shares subject to Section 2 hereof, by (i) surrendering this Warrant to Chrysalis, with the form of exercise notice attached hereto as Exhibit A duly executed by Investor and (ii) (A) making payment to Chrysalis of the aggregate Exercise Price for the applicable Warrant Shares in cash, by certified check or bank check or by wire transfer to an account designated by Chrysalis or (B) surrendering the Note to Chrysalis; provided, however,

that in the event the Investor exercises this Warrant in part, Chrysalis will, upon surrender and cancellation of the Note, issue a Note to Investor for the remaining outstanding balance after taking into account the payment of the Exercise Price for such Warrant Shares issued thereby. In addition, Schedule B attached hereto shall reflect the total number of Warrant Shares that Investor may exercise and receive under this Warrant and such Schedule shall be revised to reflect any partial exercise of this Warrant as provided herein.

(b) Investor shall for all purposes be deemed to have become the holder of record of the Warrant Shares and such Warrant Share certificate shall be dated the later of (i) the date upon which the Warrant exercise notice was duly surrendered and (ii) (A) the date payment of the Exercise Price was received by Chrysalis or (B) the date the Note was surrendered to Chrysalis.

3.2 ISSUANCE OF WARRANT SHARES. The Warrant Shares purchased shall be issued to the Investor exercising this Warrant as of the close of business on the date on which all actions and payments required to be taken or made by the Investor pursuant to Section 3.1 shall have

been so taken or made. Certificates for the Warrant Shares so purchased shall be delivered to the Investor within a reasonable time, not exceeding 10 days after

this Warrant is surrendered.

SECTION 4. RIGHTS OF THE INVESTOR. The Investor shall not, solely by virtue of this Warrant and prior to the issuance of the Warrant Shares upon due exercise of this Warrant, be entitled to any rights of a stockholder of Chrysalis.

SECTION 5. NON-TRANSFERABILITY. The Investor hereby represents and warrants that it is acquiring this Warrant and, upon the exercise thereof, the Warrant Shares, for investment and not with a view to resale or distribution thereof. The Investor may not sell, assign, transfer or otherwise dispose of this Warrant or any Warrant Shares except in accordance with the Standstill Agreement.

SECTION 6. LEGEND ON WARRANT SHARES. Certificates evidencing the Warrant Shares shall bear the legend set forth on the first page of this Warrant.

SECTION 7. REPRESENTATIONS AND WARRANTIES.

7.1 PURCHASE FOR OWN ACCOUNT. This Warrant and the Warrant Shares to be issued by Chrysalis hereunder will be acquired by Investor for its own account for investment purposes only, not as a nominee or agent and not with a view to the public resale or distribution thereof within the meaning of the Securities Act. If the Investor is an entity, the Investor was existing prior to receiving any offer hereunder and has not been organized for the specific purpose of acquiring this Warrant or the Warrant Shares.

7.2 INVESTMENT EXPERIENCE. Such Investor, alone or together with the Investor's business, tax or legal advisors (the "Purchaser Representative"), has experience as an investor in securities of companies such as Chrysalis and acknowledges that it is able to fend for itself, can bear the economic risk of its investment in this Warrant and the Warrant Shares, and, alone or together with such Purchaser Representative, has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of such investment. Further, such Investor is an "accredited investor" within the meaning of Rule 501 of Regulation D promulgated under the Securities Act.

7.3 RESTRICTED SECURITIES. Such Investor understands that this Warrant and the Warrant Shares will constitute "restricted securities" under the Securities Act inasmuch as they are being acquired from Chrysalis in a transaction not involving a public offering and that under the Securities Act and applicable regulations thereunder, may be resold without registration under the Securities Act only in certain limited circumstances. In this connection, such Investor represents that the Investor is familiar with Rule 144 promulgated under the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

7.4 ACCESS TO INFORMATION AND INVESTIGATION. (i) Such Investor has made an independent evaluation of the risks and merits of acquiring this Warrant

and the Warrant Shares and (ii) such Investor, alone or together with its Purchaser Representative, has been given the

opportunity to ask questions, and has asked such questions as such Investor has deemed necessary and appropriate, concerning Chrysalis, and has had any such questions answered to its satisfaction.

SECTION 8. MISCELLANEOUS.

8.1 AMENDMENTS. The parties may, from time to time, enter into written amendments, supplements or modifications hereto for the purpose of adding any provisions to this Warrant or changing in any manner the rights of either of the parties hereunder. No amendment, supplement or modification shall be binding on either party unless made in writing and signed by a duly authorized representative of each party.

8.2 NOTICES. All notices, requests, demands, claims, deliveries and other communications hereunder shall be in writing and shall be deemed effectively given upon (a) personal delivery to the person to be notified, (b) seven days after deposit with a domestic Post Office, by registered mail, postage prepaid and addressed to the person to be notified at the address indicated for such person below, or at such other address as such person may designate by advance written notice to the other party, (c) confirmed transmission by electronic facsimile to the fax number specified for such person below or such other number as such person may designate by advance written notice to the other party, (d) two business days after sent by certified mail (first class postage pre-paid) and (e) next day for delivery by guaranteed overnight delivery, which delivery is confirmed:

(a) if to Chrysalis to:

Chrysalis International Corporation
575 Route 28
Raritan, New Jersey 08869
Attention: John Cooper

Telecopy: (908) 722-6677

with a copy to:

Jones, Day, Reavis & Pogue
North Point
901 Lakeside Avenue
Cleveland, Ohio 44114
Attention: Thomas C. Daniels, Esq.

Telecopy: (216) 579-0212

(b) if to the Investor to:

Panlabs International, Inc.
c/o MDS Inc.
100 International Boulevard
Etobicoke, Ontario, Canada M9W 6J6
Attention: Vice-President - Legal Affairs

Telecopy: (416) 675-4095

with a copy to:

Harris Beach & Wilcox, LLP
The Granite Building
130 East Main Street
Rochester, New York 14604-1687
Attn: Thomas E. Willett, Esq.

Telecopy: (716) 232-6925

8.3 WAIVER BY CONSENT. The Investor may execute and deliver to Chrysalis a written instrument waiving, on such terms and conditions as the Investor may specify in such instrument, any of the requirements of this Warrant.

8.4 NO IMPLIED WAIVER; RIGHTS ARE CUMULATIVE. The failure to exercise or the delay in exercising by either party of any right, remedy, power or privilege under this Warrant, shall not operate as a waiver thereof. The single or partial exercise of any right, remedy, power or privilege under this Warrant shall not preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, powers and privileges herein provided are cumulative and not exclusive of any rights, remedies, powers and privileges provided by law.

8.5 GOVERNING LAW. This Warrant and rights and obligations of the parties hereunder shall be governed by, construed and interpreted in accordance with the laws of the State of Delaware applicable to agreements executed by residents of that state, and fully to be performed, in that state.

8.6 SEVERABILITY. If any provision of this Warrant is found to be unenforceable for any reason whatsoever, such provision shall be deemed null and void to the extent of such unenforceability but shall be deemed separable from and shall not invalidate any other provision of this Warrant.

8.7 CAPTIONS. Captions to the various paragraphs of this Warrant are provided for convenience only and shall not be used to construe the provisions of this Warrant.

8.8 ENTIRE AGREEMENT. This Warrant, the Note, the Note and Warrant Purchase Agreement and the Standstill Agreement constitute the entire understanding of the parties with respect to the subject matter of the Warrant and supersedes all prior discussions, agreements and representations, whether

oral or written, concerning the subject matter hereof and whether or not executed by the Investor and Chrysalis.

8.9 TITLES AND SUBTITLES. The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant.

8.10 COUNTERPARTS. This Warrant may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Warrant to be duly executed and delivered by the proper and duly authorized officers as of the day and year first above written.

CHRYSLIS INTERNATIONAL
CORPORATION

By: /s/ John G. Cooper

Name: John G. Cooper
Title: Senior Vice President & Chief
Financial Officer

PANLABS INTERNATIONAL, INC.

By: /s/ Peter Brent

Name: Peter E. Brent
Title: Director & Assistant Secretary

STANDSTILL AND CONFIDENTIALITY AGREEMENT

This Standstill and Confidentiality Agreement (this "Agreement") is made and entered into this 16th day of March 1998, by and between Chrysalis International Corporation, a Delaware corporation ("Chrysalis"), Panlabs International Inc., a Washington corporation and a wholly owned subsidiary of MDS Washington, Inc., a wholly owned subsidiary of MDS Inc. (the "Investor") and MDS Inc., a corporation organized under the laws of Canada ("MDS").

WHEREAS, Chrysalis and the Investor propose to enter into that Note and Warrant Purchase Agreement, dated the date hereof (the "Note and Warrant Purchase Agreement"), which provides for, among other things, the issuance by Chrysalis to the Investor of, (i) a US\$5,000,000 subordinated promissory note (the "Note") and (ii) a warrant (the "Warrant") to purchase 2,000,000 shares of Common Stock, par value \$0.01 per share, of Chrysalis (the "Common Stock");

WHEREAS, the parties desire to provide for certain agreements with respect to the ownership and voting by the Investor of any Common Stock or any securities of Chrysalis that are entitled to vote for the election of directors of Chrysalis, in each case now or hereafter outstanding ("Voting Securities") and any securities convertible into or exercisable or exchangeable for Voting Securities ("Convertible Securities"); and

WHEREAS, the execution and delivery of this Agreement is in consideration for the consummation of the transactions contemplated by the Note and Warrant Purchase Agreement.

NOW, THEREFORE, in consideration of the agreements, rights, obligations and covenants contained herein and other good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, Chrysalis and the Investor hereby agree as follows:

SECTION 1. AGREEMENTS REGARDING VOTING AND SECURITIES

Investor, Chrysalis and MDS agree and MDS agrees to cause its Affiliates to agree that during the Term of this Agreement:

1.1 ACQUISITION OF VOTING SECURITIES. Except as contemplated by this Agreement and except as otherwise provided for, in writing, by a majority of the Independent Directors (as defined below), no member of the MDS Group shall, directly or indirectly, acquire Voting Securities or Convertible Securities other than (i) the acquisition by Investor of the Warrant, (ii) the acquisition of the Common Stock receivable upon exercise of the Warrant in accordance with the terms and conditions of that certain Warrant Agreement, dated the date

hereof (the "Warrant Agreement") and (iii) the acquisition of Voting Securities or Convertible Securities in accordance with Section 6.1 hereto (such Common Stock, Voting Securities or Convertible Securities acquired by Investor upon exercise of the Warrant or such Right of First Refusal under Section 6 hereto being referred to as "Restricted Securities").

1.2 VOTING. The Investor shall take such action as may be required so that all Restricted Securities at any time entitled to vote are voted:

(a) for the election of the slate of nominees for election to the Board of Directors of Chrysalis selected by a majority of the members of the Board of Directors of Chrysalis (the "Directors"); and

(b) on all other matters to be voted on by the holders of Voting Securities, in accordance with the recommendation of a majority of the Directors of Chrysalis that are not employed on a full-time basis by Chrysalis (the "Independent Directors").

1.3 QUORUM. A representative or representatives of the MDS Group, as holder of the Restricted Securities, shall be present, in person or by proxy, at any meeting of stockholders of Chrysalis so that all Restricted Securities may be counted for the purpose of determining the existence of a quorum at such meeting.

1.4 VOTING TRUST OR ARRANGEMENT. No member of the MDS Group shall deposit any Restricted Securities in a voting trust or subject any Restricted Securities to any arrangement or agreement with respect to the voting of such Restricted Securities.

1.5 PROXY SOLICITATIONS. No member of the MDS Group shall solicit proxies or initiate, propose or become a "participant" in a "solicitation" (as such terms are defined in Regulation 14A under the Securities Exchange Act of 1934 or any similar successor statute (the "Exchange Act")), in opposition to any matter which has been recommended by a majority of the Directors or the Independent Directors or in favor of any matter which has not been approved by a majority of the Directors or the Independent Directors or seek to advise, encourage or influence any individual, firm, corporation, partnership or other entity (a "Person") with respect to the voting of Voting Securities in such manner, or induce or attempt to induce any Person to initiate any stockholder proposal; provided, however, that in the event (i) any matter is recommended by a majority of the Independent Directors and such matter is opposed by a majority of the Directors or (ii) any matter is not recommended by a majority of the Independent Directors and such matter is favored by a majority of the Directors, then such Voting Securities shall be voted in a manner consistent with the majority of the Independent Directors.

1.6 GROUP PARTICIPATION. No member of the MDS Group shall join a partnership, limited partnership, syndicate or other group, or otherwise act in concert with any other Person, for the purpose of acquiring, holding, voting or disposing of Voting Securities or Convertible Securities.

1.7 SOLICITATIONS OF OFFERS. No director or executive officer of any member of the MDS Group shall, and no member of the MDS Group shall, permit any of its other officers, employees or agents (including investment bankers) to, induce or attempt to induce or give encouragement to any third Person, or enter into any substantive discussions or negotiations with any third Person, in furtherance of any tender offer or business combination transaction in which shares of Voting Securities would be acquired; provided, however, that nothing in this Section 1.7 shall, or shall be construed, directly or indirectly, to limit any rights of the Investor to offer, sell or otherwise dispose of shares of Restricted Securities pursuant to any transaction effected in accordance with Section 1.8 hereof.

1.8 DISPOSITIONS. Except as otherwise permitted by this Agreement, the Investor shall not, directly or indirectly, offer, sell, dispose of, transfer or hypothecate shares of Restricted Securities other than as follows:

(a) in a sale or sales to any Person approved by a majority of the Independent Directors; or

(b) in transactions in which Restricted Securities are not sold, disposed of, or transferred to, any other person or group who or which would immediately thereafter, to the knowledge of the Investor after reasonable inquiry, Beneficially Own 5% or more of the Voting Securities or Convertible Securities then outstanding.

1.9 LEGENDS, STOP TRANSFER ORDERS AND NOTICE. The Investor agrees:

(a) to the placement on the certificate or other instrument representing Restricted Securities of the legend substantially in the following form:

"The securities evidenced hereby have not been registered under the Securities Act of 1933 (the "Act") or under any applicable state law and may not be transferred, sold or otherwise disposed of except in compliance with such Act. The securities represented by this certificate are subject to the provisions of an Agreement, dated March 16, 1998, among Chrysalis International Corporation, Panlabs International, Inc. and MDS Inc., a copy of which is on file at the office of the Secretary of Chrysalis International Corporation."

(b) to the entry of stop transfer orders with the transfer agent (or agents) and the registrar (or registrars) of Chrysalis against the transfer, other than in compliance with the requirements of this Agreement, of legended securities of which the Investor from time to time is the Beneficial Owner.

SECTION 2. CERTAIN DEFINITIONS

2.1 CERTAIN DEFINITIONS. For purposes of this Agreement, the following terms shall have the following meanings:

3

(a) Affiliate. A Person shall be deemed to be a "Affiliate" of

another Person in accordance with the term "affiliate" as defined in Rule 12b-2 under the Exchange Act.

(b) Beneficial Owner. A Person shall be deemed a "Beneficial Owner"

of or to "Beneficially Own" any Voting Securities in accordance with the term "beneficial ownership" as defined in Rule 13d-3 under the Exchange Act as in effect on the date hereof, and shall also include Voting Securities which such Person or any Affiliate of such Person has the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise.

(c) MDS Group. "MDS Group" shall mean MDS and its Affiliates

(regardless of whether such person is an Affiliate on the date hereof), both in their individual capacities and collectively. An individual shall not be deemed to be an Affiliate for purposes of this definition if such individual is the Beneficial Owner of less than 100,000 shares of Voting Securities or Convertible Securities solely for investment purposes and is not a member of a "group" which includes the MDS Group as defined by Section 13(d) of the Exchange Act.

(d) Term of this Agreement. "Term of this Agreement" for purposes

of this Agreement shall mean a period commencing with the date of this Agreement and ending on the first to occur of (i) an Event of Default under Section 3.8 of the Note or (ii) the date that the Investor is no longer the Beneficial Owner of any Restricted Securities.

SECTION 3. REPRESENTATIONS AND WARRANTIES OF CHRYSALIS

Chrysalis represents and warrants to the Investor as follows:

3.1 CORPORATE EXISTENCE, DUE AUTHORIZATION, AND EXECUTION OF CHRYSALIS. Chrysalis is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, with full corporate power and authority to execute and deliver this Agreement and each of the other agreements contemplated hereby, to perform Chrysalis' obligations hereunder and

thereunder, and to consummate the transactions contemplated hereby and thereby. This Agreement and the consummation of the transactions contemplated hereby and thereby have been duly authorized by all necessary corporate action of Chrysalis. This Agreement has been duly executed and delivered by Chrysalis and constitutes a legal, valid and binding obligation of Chrysalis, enforceable against Chrysalis in accordance with its terms except to the extent that such enforceability may be limited by bankruptcy or similar laws affecting the rights of creditors generally and by the availability of equitable remedies.

3.2 NO CONFLICTS. The execution and delivery of this Agreement and each of the other agreements contemplated hereby and the consummation of the transactions contemplated hereby and thereby will not conflict with, or result in any violation of or default under, any

4

provision of the Third Amended and Restated Certificate of Incorporation or Third Amended and Restated By-Laws of Chrysalis.

SECTION 4. REPRESENTATIONS AND WARRANTIES OF THE INVESTOR AND MDS

4.1 CORPORATE EXISTENCE, DUE AUTHORIZATION, AND EXECUTION OF THE INVESTOR. The Investor is a corporation duly organized, validly existing, and in good standing under the laws of the State of Washington, with full corporate power and authority to execute and deliver this Agreement and each of the other agreements contemplated hereby, to perform their obligations hereunder and thereunder, and to consummate the transactions contemplated hereby and thereby. This Agreement and each of the other agreements contemplated hereby and the consummation of the transactions contemplated hereby and thereby will, at the Closing, have been duly authorized by all necessary corporate action of the Investor. This Agreement has been duly executed and delivered by the Investor and constitutes a legal, valid and binding obligation of the Investor, enforceable against the Investor in accordance with its terms except to the extent that such enforceability may be limited by bankruptcy or similar laws affecting the rights of creditors generally and by the availability of equitable remedies.

4.2 NO CONFLICTS. The execution and delivery of this Agreement and each of the other agreements contemplated hereby and the consummation of the transactions contemplated hereby and thereby will not conflict with, or result in any violation of or default under, any provision of the charter documents of the Investor.

4.3 DUE AUTHORIZATION OF MDS. This Agreement constitutes a legal, valid and binding obligation of MDS, enforceable against MDS in accordance with its terms. MDS represents that it has full power and authority to enter into this Agreement and the transactions contemplated hereby, and, to the extent applicable, has taken all necessary corporate, partnership or other action with

respect to the execution and delivery of such agreements and has duly executed and delivered this Agreement pursuant to all necessary corporate, partnership or other action, which has been duly taken with respect to this Agreement.

SECTION 5. CONFIDENTIALITY

5.1 CONFIDENTIALITY; EXCEPTIONS. Except to the extent expressly authorized by this Agreement, the Note and Warrant Purchase Agreement, the Note and the Warrant, or otherwise agreed in writing, for the Term of this Agreement and for five years thereafter, the Investor, MDS and Chrysalis and Affiliates of Investor, MDS and Chrysalis shall keep confidential and shall not publish or otherwise disclose or use for any purpose other than as provided for in this Agreement any information generally not known to the public that relates to the drug development or contract research fields generally or to the business of Chrysalis, MDS or the Investor and Affiliates of Chrysalis, MDS and Investor, including, but not limited to, techniques and data, inventions, practices, methods, knowledge, know-how, skill, experience, test data including pharmacological, pharmacokinetic, toxicological, immunological and clinical test data,

5

analytical and quality control data, marketing, pricing, distribution, costs, sales, patent or legal data or descriptions, compositions of matter, compounds, assays and biological materials (collectively, "Information") and other confidential and proprietary information and materials furnished to it by the other party pursuant to this Agreement or any Information developed by the Investor, MDS or Chrysalis or Affiliates of Investor, MDS and Chrysalis during the course of any strategic alliance, joint venture or collaboration between the Investor, MDS and Chrysalis or Affiliates of Investor, MDS and Chrysalis (collectively, "Confidential Information"), except to the extent that it can be established by the receiving party that such Confidential Information:

(a) was in the lawful knowledge and possession of, or was independently developed by, the receiving party prior to the time it was disclosed to, or learned by, the receiving party as evidenced by written records kept in the ordinary course of business, or other documentary proof of actual use by the receiving party;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this Agreement; or

(d) was disclosed to the receiving party, other than under an obligation of confidentiality, by a third party who had no obligation to the disclosing party not to disclose such information to others.

5.2 AUTHORIZED DISCLOSURE. Chrysalis, MDS and the Investor may disclose Confidential Information of the other party to the extent such disclosure is reasonably necessary in filing or prosecuting patent, copyright and trademark applications, prosecuting or defending litigation, complying with applicable governmental regulations, obtaining regulatory approval, conducting preclinical or clinical trials or marketing products; provided, however, that if a party is required by law or regulation to make any such disclosure of the other party's Confidential Information it shall, except where impracticable for necessary disclosures, given reasonable advance notice to the other party of such disclosure requirement and, except to the extent inappropriate in the case of patent applications, shall use its reasonable efforts to secure confidential treatment of such Confidential Information required to be disclosed. Nothing in this Section 5 shall restrict any party from using for any purpose any Information developed by it during the course of any strategic alliance, joint venture or collaboration between Chrysalis, MDS and the Investor.

5.3 SURVIVAL. This Section 5 shall survive the termination or expiration of this Agreement for a period of five years.

5.4 SPECIFIC ENFORCEMENT. The parties acknowledge and agree that Chrysalis, MDS or the Investor, as the case may be, would be irreparably damaged in the event any of the provisions of this Section 5 of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that Chrysalis, MDS or the

6

Investor, as the case may be, shall be entitled to an injunction or injunctions to prevent breaches of this Section 5 of this Agreement and to specifically enforce this Section 5 of this Agreement and the terms and provisions thereof in any action instituted in any court of the United States or any state thereof having subject matter jurisdiction, in addition to any other remedy to which Chrysalis, MDS or the Investor or any Affiliates of Chrysalis, MDS or Investor, as the case may be, may be entitled, at law or in equity.

SECTION 6. RIGHT OF FIRST REFUSAL.

6.1 RIGHT OF FIRST REFUSAL. (a) Registered Public Offerings. If

Chrysalis issues and sells Common Stock in a registered public offering (other than a registration on Form S-8 or any similar or successor form thereto, relating to an employee or director stock option, stock purchase or other benefit plan or on Form S-4 or any similar or successive form thereto relating to any business combination) (a "Public Offering"), the Investor shall have, at its option, either (i) the registration rights set forth in Section 7 of this Agreement or (ii) the right to purchase the Investor's pro rata share (or any part thereof) of the publicly-offered Common Stock (the "Offered Common Stock") on the same terms as contained in the registration statement relating to such Common Stock; provided, however

the issuance of such shares of Common Stock to Investor as contemplated hereby pursuant to this Section 6(a)(ii) may be effected by Chrysalis in compliance with any applicable regulatory requirements, including, without limitation, the rules and regulations under the federal or state securities laws and promulgated by the National Association of Securities Dealers. The Investor's pro rata share of the Offered Common Stock will be a fraction of the Offered Common Stock, of which the number of shares of Common Stock (or securities convertible into or exercisable for Common Stock) held by the Investor on the date of the Chrysalis Notice (as defined in Section 6.2) (the "Notice Date") shall be the numerator and the total number of shares of Common Stock issued and outstanding on the Notice Date shall be the denominator.

(b) Other Offerings. If, until such time as the Investor no longer

Beneficially Owns any Restricted Securities, Chrysalis should come to a written understanding with one or more potential investors, acceptable to Chrysalis, to issue and sell, in a transaction not registered under the Securities Act of 1933 (the "Securities Act") in reliance upon a claimed exemption thereunder, any equity or debt securities including options, warrants or other securities other than as set forth in Section 6.5 (collectively, "Securities"), it shall give the Investor the first right to purchase all such privately offered Securities on the same terms as Chrysalis is willing to sell such Securities to such potential investors.

6.2 NOTICE. Prior to any proposed sale or issuance by Chrysalis of any Securities or Offered Common Stock, Chrysalis shall notify the Investor in writing (the "Chrysalis Notice"), of its intention to sell and issue such securities which Chrysalis Notice shall set forth the general terms under which it proposes to make such sale. The Chrysalis Notice shall be signed by Chrysalis and, in the case of privately offered Securities shall indicate the potential investors' concurrence with the description of the terms. The Investor shall have 10 business days after receipt of such notice to notify Chrysalis in writing (the "Investor Notice") that it elects to

7

purchase all of the Securities so offered or its pro rata share of the Offered Common Stock, as the case may be, in each case on the terms set forth in the Chrysalis Notice. In the case of a private offering of Securities, the Investor shall purchase and Chrysalis shall sell the Securities within 30 days of the date of the Chrysalis Notice.

6.3 FAILURE TO NOTIFY. In the case of a private offering of Securities, if, within 10 business days after the Notice Date, the Investor does not notify Chrysalis that it desires to purchase all of the Securities described in the Chrysalis Notice upon the terms and conditions set forth in the Chrysalis Notice, then Chrysalis may, during a period of 120 days following the end of such 10-day period, sell and issue the Securities which the Investor does not

elect to purchase to the investors with whom the understanding had been reached (or to the representative of such investors and other investors designated by such representative) at a price and upon terms and conditions no more favorable in any material respect to such investors as those set forth in the Chrysalis Notice. In the event that Chrysalis has not sold such Securities to such investors within said 120-day period, Chrysalis shall not thereafter issue or sell any Securities without first offering such securities to the Investor in the manner provided above.

6.4 PAYMENT. If the Investor gives Chrysalis notice that it desires to purchase all of the Securities or up to a pro rata share of the Offered Common Stock offered by Chrysalis, then payment for the Securities shall be by check or wire transfer, against delivery of the securities at the executive offices of Chrysalis at the time of the scheduled closing therefor. Chrysalis shall take all such action (except registration under the Securities Act) as may reasonably be required by any regulatory authority in connection with the exercise by the Investor of the right to purchase Securities or Offered Common Stock as set forth in this Section 6.

6.5 LIMITATION. The right of first refusal contained in this Section 6 shall not apply to the issuance by Chrysalis of:

(a) shares of Common Stock issued to employees, officers, directors and consultants pursuant to the exercise of stock options or as payment of employee benefits;

(b) securities issued pursuant to the acquisition of another corporation by Chrysalis by merger, purchase of all or substantially all of the assets, or other reorganization; or

(c) securities issued in connection with any stock split, stock dividend or recapitalization by Chrysalis.

SECTION 7. REGISTRATION RIGHTS. For purposes of this Section 7, the term "Registrable Securities" means any of the shares of Common Stock issued in exercise of the Warrant and any other shares of Common Stock related thereto by way of stock dividend or stock split, any shares of Common Stock held by Investor that were acquired pursuant to the exercise by the Investor of its Right of First Refusal pursuant to Section 6 of this Agreement or in connection with any recapitalization, merger, consolidation or reorganization; provided that, as to any particular securities, such securities will cease to be Registrable Securities when they have

been sold pursuant to Rule 144 promulgated by the Securities and Exchange Commission (the "SEC") or any similar rule then in force ("Rule 144").

7.1 PIGGYBACK REGISTRATION. (a) If at any time, and from time

to time, Chrysalis proposes to issue and sell Common Stock in a registered public offering (other than a registration on Form S-8, or any similar or successor form, relating to an employee or director stock option, stock purchase or other benefit plan, or a registration on Form S-4 or any similar or successor form relating to shares issuable in a merger, consolidation, exchange offer, purchase of assets or any similar transaction) ("Piggyback Registration"), Chrysalis shall:

(i) promptly give to each holder of Registrable Securities written notice thereof (which written notice shall include a list of the jurisdictions in which Chrysalis intends to attempt to qualify such securities under or otherwise comply with the applicable blue sky or other state securities laws); and

(ii) include in such registration (and any related qualification under or other compliance with blue sky or other state securities laws), and in any underwriting involved therein on the same terms and conditions as the securities being issued thereunder, all the Registrable Securities specified in a written request, made within 5 days after receipt of such written notice from Chrysalis by Investor; provided that if such registration is a registration in which the managing underwriter advises Chrysalis that marketing factors require a limitation of the number of shares of Common Stock to be underwritten in such registration (a "Cutback Registration"), then if (Y) such registration is a primary registration, whether or not it includes a secondary registration, on behalf of Chrysalis, Chrysalis shall register in such registration (I) first, the shares of Common Stock Chrysalis proposes to sell in such registration and (II) second, shares of Common Stock held by Investor and any holders of Common Stock who have the right to request inclusion of Common Stock held by such holder in such registration (the "Electing Holders") on a pro

rata basis, based upon the number of shares of Common Stock Investor

and any Electing Holders originally sought to include in such registration; and (Z) if such registration is solely a secondary registration on behalf of holders of Common Stock, Chrysalis shall register in such registration (I) first, the shares of Common Stock, if any, Chrysalis proposes to register in such registration as a result of a holder exercising demand registration rights and (II) second, the shares of Common Stock held by Investor and Electing Holders on a pro rata basis based upon the number of shares of Common Stock Investor and Electing Holders originally sought to include in such registration; provided, further, that if such registration is a Cutback Registration, Chrysalis shall use its best efforts to include all shares of Registrable Securities specified in the holder's written request, but such best efforts shall not include an obligation on the part of Chrysalis to reduce the number of shares of Chrysalis or the other Electing Holders included in such Cutback Registration beyond that expressly provided for in this Section 7.1. Chrysalis and the Investor shall cooperate in good faith with regard to any proposed

Chrysalis and the Investor shall discuss in good faith alternatives for the sale, disposal or transfer of the Voting Securities owned by the Investor.

(b) If the registration of which Chrysalis gives notice is pursuant to an effective registration statement under the Securities Act involving an underwriting, Chrysalis shall so advise each holder as part of Chrysalis Notice. In such event, the right of each such holder to registration pursuant to this Section shall be conditioned upon such holder's participation in such underwriting, the inclusion of the Registrable Securities in the underwriting and such holder entering into an underwriting agreement, containing customary terms and conditions in a form reasonably acceptable to the holder and Chrysalis with the underwriter or underwriters selected for such underwriting (the "Underwriters") by Chrysalis, provided that if such underwriting agreement shall not be acceptable to holder, Chrysalis may proceed with such registration without registering the stock of holder in such registration.

7.2 INDEMNIFICATION. (a) In connection with any such Piggyback Registration, Chrysalis agrees to indemnify to the full extent permitted by law, the Investor, its officers and directors and each person who controls the Investor (within the meaning of the Exchange Act and the Securities Act) against all losses, claims, damages, liabilities and expenses caused by any untrue or alleged untrue statement of material fact contained in any registration statement, prospectus or preliminary prospectus or any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as the same are caused by or contained in any information furnished to Chrysalis by the Investor or the Investor's agents expressly for use therein or by the Investor's failure to deliver a copy of the registration statement or prospectus or any amendments or supplements thereto after Chrysalis has furnished the Investor with a sufficient number of copies of the same.

(b) In connection with any such Piggyback Registration, the Investor will furnish to Chrysalis such information relating to the Investor and the Investor's ownership of the Registrable Securities as Chrysalis reasonably requests for use in connection with any such registration statement or prospectus and agrees to indemnify, to the extent permitted by law, Chrysalis, its directors and officers and each person who controls Chrysalis (within the meaning of the Exchange Act and the Securities Act) against any losses, claims, damages, liabilities and expenses resulting from any untrue or alleged untrue statement of material fact or any omission or alleged omission of a material fact required to be stated in the registration statement or prospectus or any amendment thereof or supplement thereto or necessary to make the statements therein not

misleading, to the extent, but only to the extent, that such untrue statement or omission is actually contained in any information so furnished by the Investor or the Investor's agents to Chrysalis; provided, that the Investor's obligation hereunder shall be limited to the gross amount of proceeds received by the Investor pursuant to such registration statement.

(c) Any person entitled to indemnification hereunder agree that, upon the service of a summons or other initial legal process upon it in any action or suit instituted against it or upon its receipt of written notification of the commencement of any investigation or

10

inquiry of, or proceeding against it, in respect of which indemnity may be sought on account of any indemnity agreement contained in such paragraphs, it will promptly give written notice (a "Notice") of such service or notification to the party or parties from whom indemnification may be sought hereunder. No indemnification provided for herein shall be available to any party who shall fail so to give the Notice if the party to whom such Notice was not given was unaware of the action, suit, investigation, inquiry or proceeding to which the Notice would have related and was prejudiced by the failure to give the Notice, but the omission so to notify such indemnifying party or parties of any such service or notification shall not relieve such indemnifying party or parties from any liability which it or they may have to the indemnified party for contribution or otherwise than on account of such indemnity agreement. Any indemnifying party shall be entitled at its own expense to participate in the defense of any action, suit or proceeding against, or investigation or inquiry of, an indemnified party. Any indemnifying party shall be entitled, if it so elects within a reasonable time after receipt of the Notice by giving written notice (the "Notice of Defense") to the indemnified party, to assume (alone or in conjunction with any other indemnifying party or parties) the entire defense of such action, suit, investigation, inquiry or proceeding, in which event such defense shall be conducted, at the expense of the indemnifying party or parties, by counsel chosen by such indemnifying party or parties and reasonably satisfactory to the indemnified party or parties; provided, however, that (i) if the indemnified party or parties reasonably determine that there may be a conflict between the positions of the indemnifying party or parties and of the indemnified party or parties in conducting the defense of such action, suit, investigation, inquiry or proceeding or that there may be legal defenses available to such indemnified party or parties different from or in addition to those available to the indemnifying party or parties, then counsel for the indemnified party or parties shall be entitled to conduct the defense to the extent reasonably determined by such counsel to be necessary to protect the interests of the indemnified party or parties and (ii) in any event, the indemnified party or parties shall be entitled, at its or their own expense to have counsel chosen by such indemnified party or parties participate in, but not conduct, the defense. It is understood that the indemnifying parties shall not, in respect of the legal defenses

of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for (a) the fees and expenses of more than one separate firm (in addition to any local counsel) for the Investor and each person, if any, who controls the Investor within the meaning of Section 15 of the Act, and (b) the fees and expenses of more than one separate firm (in addition to any local counsel) for Chrysalis, its directors, its officers who sign the Registration Statement and each person, if any, who controls Chrysalis within the meaning of Section 15 of the Act. If, within a reasonable time after receipt of the Notice, an indemnifying party gives a Notice of Defense and the counsel chosen by the indemnifying party or parties is reasonably satisfactory to the indemnified party or parties, the indemnifying party or parties will not be liable hereunder for any legal or other expenses subsequently incurred by the indemnified party or parties in connection with the defense of the action, suit, investigation, inquiry or proceeding, except that (A) the indemnifying party or parties shall bear the legal and other expenses incurred in connection with the conduct of the defense as referred to in clause (i) of the proviso to the preceding sentence and (B) the indemnifying party or parties shall bear such other expenses as it or they have authorized to be incurred by the indemnified party or parties. If, within a reasonable time

11

after receipt of the Notice, no Notice of Defense has been given, the indemnifying party or parties shall be responsible for any legal or other expenses incurred by the indemnified party or parties in connection with the defense of the action, suit, investigation, inquiry or proceeding. The indemnifying party or parties shall not be liable for any settlement of any proceeding effected without its or their written consent, provided such consent has not been unreasonably withheld.

7.3 REGISTRATION PROCEDURES. (a) In case of each registration, qualification or compliance effected by Chrysalis subject to this Section 7, Chrysalis shall keep holder advised in writing as to the initiation of each such registration, qualification and compliance and as to the completion thereof. In addition, at its expense, Chrysalis shall:

(i) prepare and file with the SEC a registration statement with respect to such Registrable Securities, and use reasonable efforts to cause such registration statement to become effective; provided that before filing a registration statement or prospectus or any amendments or supplements thereto, Chrysalis will furnish to the counsel selected by the Investor copies of all such documents proposed to be filed; provided further that in the event that Chrysalis files a registration statement on Form S-3 pursuant to Rule 415 of the Act, Chrysalis shall use reasonable efforts to cause such registration statement to remain effective for a reasonable period of time as determined by the Independent Directors;

(ii) furnish to the Investor such number of copies of such registration statement, each amendment and supplement thereto (in each case including all exhibits thereto), the prospectus included in such registration statement (including each preliminary prospectus) and such other documents as the Investor may reasonably request in order to facilitate the disposition of the Registrable Securities owned by the Investor;

(iii) furnish such number of prospectuses, including preliminary prospectuses, and other documents incident thereto as holder may reasonably request from time to time, which shall not be deemed a Selling Expense (as defined in Section 7.3(c));

(iv) notify the Investor, at any time when a prospectus relating thereto is required to be deliverable under the Securities Act, of the happening of any event as a result of which the prospectus included in such registration statement or any document incorporated therein by reference contains an untrue statement of a material fact or omits to state any material fact necessary to make the statements therein not misleading, and prepare a supplement or amendment to such prospectus or any such document incorporated therein by reference so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any material fact necessary to make the statements therein not misleading;

12

(v) cause all such Registrable Securities to be listed on the Nasdaq National Market;

(vi) register or qualify such Registrable Securities under such other securities or blue sky laws of such jurisdictions of the United States as holder may deem reasonable to enable it to consummate the disposition in such jurisdiction of the Registrable Securities (provided that Chrysalis will not be required to (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this section, or (ii) consent to general service of process in any such jurisdiction); and

(vii) upon the sale of any Registrable Securities pursuant to such registration statement, remove all restrictive legends from all certificates or other instruments evidencing the Registrable Securities.

(b) Chrysalis may require the Investor to furnish, and the Investor shall furnish, to Chrysalis such information regarding the distribution of such securities as Chrysalis may from time to time reasonably request in writing. The Investor further agrees that, upon receipt of any notice from Chrysalis of the happening of any event of the kind described in Section

7.3(a) (iv) hereof, the Investor will immediately discontinue disposition of Registrable Securities until the Investor's receipt of the copies of the supplemented or amended prospectus contemplated in Section 7.3(a) (iv) hereof and, if so directed by Chrysalis, the Investor will deliver to Chrysalis all copies, other than permanent file copies then in the Investor's possession, of the prospectus covering such Registrable Securities current at the time of receipt of such notice.

(c) Except as required by law, all expenses incurred by Chrysalis in complying with this Section 7, including but not limited to, all registration, qualification and filing fees, printing expenses, fees and disbursements of counsel for Chrysalis, blue sky fees and expenses in accordance with Section 7.2(a) (vi) hereof, including fees and disbursements of counsel related to all blue sky matters, but excluding the compensation of regular employees of Chrysalis which shall be paid in any event by Chrysalis ("Registration Expenses") incurred in connection with any registration, qualification or compliance pursuant to such Sections shall be borne by Chrysalis. All underwriting discounts and selling commissions and transfer taxes applicable to a sale ("Selling Expenses") incurred in connection with any registration of Registrable Securities and the legal fees of holder shall be born by holder.

7.4 ADDITIONAL REGISTRATION RIGHTS. From and after the date hereof, Chrysalis will not, and will not permit any of its subsidiaries to:

(a) grant to any Person any right to have any securities of Chrysalis registered under the Securities Act in so far as such rights would be superior to those rights granted to the Investor hereunder this Agreement; and

13

(b) take any other action which would prevent or preclude Chrysalis from complying with the registration priorities granted to the Investor hereunder Section 7 of this Agreement.

7.5 FURTHER INFORMATION. If Registrable Securities owned by a holder are included in any registration, Investor shall furnish Chrysalis such information regarding itself and the distribution proposed by Investor as Chrysalis may reasonably request and as shall be required in connection with any registration, qualification or compliance referred to in this Agreement.

SECTION 8. MISCELLANEOUS

8.1 SPECIFIC ENFORCEMENT. The parties acknowledge and agree that Chrysalis, MDS and the Investor would be irreparably damaged in the event any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that Chrysalis, MDS and the Investor shall be entitled to an injunction or

injunctions to prevent breaches of this Agreement and to specifically enforce this Agreement and the terms and provisions thereof in any action instituted in any court of the United States or any state thereof having subject matter jurisdiction, in addition to any other remedy to which Chrysalis, MDS and the Investor may be entitled, at law or in equity.

8.2 MODIFICATION; WAIVER. This Agreement may be modified in any manner and at any time by written instrument executed by the parties hereto. Any of the terms, covenants, and conditions of this Agreement may be waived at any time by the party entitled to the benefit of such term, covenant or condition.

8.3 NOTICES. All notices, requests, demands, claims, and other communications hereunder shall be in writing and shall be deemed effectively given upon (a) personal delivery to the person to be notified; (b) seven days after deposit with a domestic Post Office, by registered mail, postage prepaid and addressed to the person to be notified at the address indicated for such person below, or at such other address as such person may designate by advance written notice to the other party; (c) confirmed transmission by electronic facsimile to the fax number specified for such person below or such other number as such person may designate by advance written notice to the other party; (d) two business days after sent by certified or registered mail (first class postage pre-paid); and (e) next day for delivery by guaranteed overnight delivery which delivery is confirmed:

14

(a) if to Chrysalis to:

Chrysalis International Corporation
575 Route 28
Raritan, New Jersey 08869
Attention: John Cooper

Telecopy: (908) 722-6677

with a copy to:

Jones, Day, Reavis & Pogue
North Point
901 Lakeside Avenue
Cleveland, Ohio 44114
Attention: Thomas C. Daniels, Esq.

Telecopy: (216) 579-0212

(b) if to the Investor to:

Panlabs International Inc.
c/o MDS Inc.

100 International Blvd.
Etobicoke, Ontario
Canada, M9W 6J6
Attention: Vice-President - Legal Affairs

Telecopy: (416) 675-4095

with a copy to:

Harris Beach & Wilcox, LLP
The Granite Building
130 East Main Street
Rochester, New York 14604-1687
Attn: Thomas E. Willett, Esq.

Telecopy: (716) 232-6925

8.4 PARTIES IN INTEREST; ASSIGNMENT. This Agreement and all the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns, but neither this Agreement nor any of the rights, interests and obligations hereunder shall be assigned by any of the parties hereto without the prior written consent of the other parties hereto; provided, however, that the Investor may assign or transfer its rights, interests and obligations hereunder this Agreement, the Note and the Warrant to an

15

Affiliate of MDS so long as any such Affiliate also becomes a signatory to and is thereby bound by the terms and conditions of this Agreement, the Note and the Warrant. In the event that the Investor does assign or transfer its rights, interests and obligations hereunder this Agreement, the Note and the Warrant to an Affiliate, the Investor will continue to be bound by the terms and conditions of Section 1, Section 5 and Section 8.1 of this Agreement. Nothing in this Agreement, whether expressed or implied, shall be construed to give any Person other than the parties hereto any legal or equitable right, remedy or claim under or in respect of this Agreement.

8.5 COUNTERPARTS. This Agreement may be executed in one or more counterparts, all of which shall constitute one and the same instrument.

8.6 HEADINGS. The article and section headings of this Agreement are for convenience of reference only and shall not be deemed to alter or affect the meaning or interpretation of any provisions hereof.

8.7 GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware applicable to contracts made and to be performed therein.

8.8 SUPERSEDE PRIOR CONFIDENTIALITY AGREEMENT. This Agreement

(including the documents referred to herein) constitutes the entire agreement with respect to the keeping and maintaining of confidentiality of the Information and the Confidential Information between the parties, and this Agreement shall supersede and replace the certain Confidentiality Agreement, dated as of _____ entered into by and between Chrysalis and Investor and any other prior understandings, agreements, or representations by or among the parties, written or oral, to the extent they have related in any way to the keeping or maintaining the confidentiality of the Information and the Confidential Information.

8.9 NO IMPLIED WAIVER; RIGHTS ARE CUMULATIVE. The failure to exercise or the delay in exercising by either party of any right, remedy, power or privilege under this Agreement, shall not operate as a waiver thereof. The single or partial exercise of any right, remedy, power or privilege under this Agreement shall not preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, powers and privileges herein provided are cumulative and not exclusive of any rights, remedies, powers and privileges provided by law.

16

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

CHRYSALIS INTERNATIONAL
CORPORATION

By: /s/ John G. Cooper

Name: John G. Cooper
Title: Senior Vice President and
Chief Financial Officer

PANLABS INTERNATIONAL, INC.

By: /s/ Peter E. Brent

Name: Peter E. Brent
Title: Director & Assistant Secretary

MDS Inc.

By: /s/ Peter E. Brent

Name: Peter E. Brent

Title: Vice President Legal Affairs
& Corporate Secretary

17

SECURITY AGREEMENT

THIS SECURITY AGREEMENT, dated March 16, 1998, is given by CHRYSALIS INTERNATIONAL CORPORATION, a New Jersey corporation with its principal office located at 575 Route 28, Raritan, New Jersey (the "Company") to PANLABS INTERNATIONAL, INC., a Washington corporation, having its principal office at c/o MDS Inc., 100 International Boulevard, Etobicoke, Ontario, Canada M9W 6J6 ("PanLabs").

Concurrently herewith, and in accordance with the terms and conditions of that Note and Warrant Purchase by and between the Company and PanLabs, dated on even date herewith (the "Purchase Agreement"), the Company is issuing a 6% Subordinated Note in the principal amount of Five Million and 00/100 Dollars (\$5,000,000) (the "Note") to PanLabs.

Unless otherwise expressly provided in this Security Agreement, all capitalized terms in this Security Agreement shall have the meanings given to them in the Purchase Agreement, and unless otherwise provided in this Security Agreement or the Purchase Agreement, all terms shall have the same meanings as given to them in the Uniform Commercial Code of the State of Delaware as amended from time to time.

1. Security Interest. As security for payment of the Note and any other

obligations of the Company to PanLabs pursuant to and under the Note, whether now existing or hereafter created or incurred, matured or unmatured, direct or contingent, including any extensions and renewals thereof or a part thereof, together with interest and costs of enforcement and collection thereof and of this Security Agreement, including all reasonable attorneys' fees and disbursements incurred by PanLabs (collectively called the "Liabilities"), the Company hereby grants to PanLabs a security interest in all of the following properties (collectively, called the "Collateral"):

(i) All assets and property of the Company, excepting real property but including, without limitation, all goods, tangible property, machinery, equipment, furniture, fixtures, vehicles, parts, leasehold improvements, accounts, inventory, chattel paper, contract rights, documents, instruments, choses in action, general intangibles, goodwill and intellectual property, of any kind or nature in which the Company has an interest now or in the future, and which are now existing or hereafter created or acquired, together with any and all additions, replacements, accessions and substitutions thereto or therefore, and any proceeds thereof; and

(ii) All insurance, to the extent it represents proceeds, covering the properties described in Section 1(i) above against risk of fire, theft or any other physical damage or loss, now owned or hereafter acquired.

2. Locations of the Company and Collateral. The principal office of the

Company is at the address shown in the preamble to this Security Agreement. All locations at which the Collateral will be kept or at which the Company does business are indicated on the Schedule A attached to and made a part of this

Security Agreement. The Company will notify PanLabs of any new or changed locations at which any of the Collateral is kept or the Company does business.

If any of the Collateral is or will be a fixture, the Company will provide legal descriptions and the names of record owners of the premises to which the Collateral will be affixed sufficient for perfection of the security interests of PanLabs.

3. PanLabs's Lien. Except for the Permitted Liens and the security

interest granted hereby, the Company is the owner of the Collateral free from all liens, encumbrances, and security

interests. The Company will not sell or transfer the Collateral or, except in the case of securing Purchase Money Indebtedness, any interest therein (including, without limitation, a security interest) without the prior written consent of PanLabs except for sales of inventory and collection of accounts in the ordinary course of business and prior to an Event of Default (as herein defined). The Company will defend the Collateral against the claims and demands of all persons, and will cause the immediate removal and termination of any levy, execution, judgment or other lien, or similar claim of third persons to the Collateral.

4. Perfection of Security Interest. The Company will execute and deliver

to PanLabs such financing statements, security agreements, assignments (including without limitation assignments of specific accounts and chattel paper) as PanLabs or PanLabs's representatives may at any time or from time to time reasonably request.

5. Taxes. The Company will pay promptly, when due, all taxes and

assessments upon the Collateral or its use or operation, or upon this Security Agreement.

6. Insurance. The Company at all times will keep the Collateral fully

insured with financially sound and reputable insurers, against such casualties and contingencies and of such types and in such amounts as is reasonable. In any event and without specific request by PanLabs, the Company will insure the Collateral against fire, including so-called extended coverage and theft. The Company will deliver certificates and policies evidencing the insurance coverage of the Collateral to PanLabs upon its reasonable requests.

The Company will notify PanLabs in the event of any loss, damage, or other casualty affecting the Collateral. The Company hereby assigns to PanLabs any and all monies which may become due and payable under any policy insuring the Collateral, directs any such insurance company to make payments directly to PanLabs, and authorizes PanLabs to apply such monies in payment on account of the Liabilities, whether or not due, and to remit any surplus to the Company.

7. Protection of PanLabs's Interest. Ten or more days after the day

PanLabs mails the Company notice, upon failure of the Company to: (i) remove liens or interests prohibited by Section 3 of this Security Agreement, (ii) pay taxes or assessments as required by Section 5 of this Security Agreement, or (iii) provide evidence satisfactory to PanLabs of insurance as required by Section 7 of this Security Agreement, PanLabs in its discretion may discharge

any such liens or interests, pay taxes or assessments, and obtain insurance coverage on the Collateral. The Company agrees to reimburse PanLabs on demand for any and all expenditures so made, and until paid the amount thereof also shall be part of the Liabilities secured by the Collateral. PanLabs shall have no obligation to the Company to make any such expenditures nor shall the making thereof relieve any default hereunder.

8. Representations Regarding Collateral. The Company represents and

warrants to PanLabs, and so long as this Security Agreement remains in effect shall be deemed to continue to represent and warrant that: (i) the Collateral is genuine and what it purports to be; (ii) each account and chattel paper represents a bona fide transaction and is enforceable according to the contract underlying the account or the writings constituting the chattel paper; (iii) the amount shown on Company's books and on any invoice or statement delivered to PanLabs with respect to accounts, chattel paper, and appropriate general intangibles is correct and duly owing to the Company; (iv) no set-off or counterclaim to any account or chattel paper exists, and other discounts or deductions given in the ordinary course of business are fully disclosed on the books and records of the Company and on financial statements given to PanLabs; and (v) no agreement has been made with any person under which any deduction or discount may be claimed, except regular discounts allowed by the Company for prompt payments of accounts.

9. Events of Default. The following events or conditions shall be an

"Event of Default" under this Security Agreement: (i) any failure to comply with any term of this Security Agreement and (ii) upon the occurrence of any Event of Default specified in the Note.

10. Remedies. Upon the occurrence of an Event of Default, PanLabs shall

have the rights and remedies of a secured party under the Uniform Commercial Code of the State of Delaware as amended from time to time in any jurisdiction where enforcement of this Security Agreement is sought in addition to all other rights and remedies at law or in equity. Among other remedies, PanLabs may take immediate possession of the Collateral and for that purpose PanLabs may, so far as the Company can give authority therefor, enter upon any premises on which the Collateral or any part thereof may be situated and secure or remove the same therefrom. Upon request of the PanLabs, the Company will assemble and make the Collateral available to PanLabs, at a reasonable place and time designated by PanLabs. The Company's failure to take possession of any Collateral at any time and place reasonably specified by PanLabs in writing to the Company shall constitute an abandonment of such property by the Company and PanLabs shall have no liability or responsibility with respect to such property. The Company agrees that notice of the time and place of public sale of any of the Collateral or of the time after which any private sale thereof is to be made or of other disposition of the Collateral shall be deemed reasonable notice ten (10) days after such notice is deposited in the mail or otherwise delivered to Company at the address shown in the preamble of this Security Agreement.

In addition to its other rights, PanLabs may but shall not be obligated to notify any parties which are obligated to pay the Company any Collateral or proceeds thereof, to make all payments directly to PanLabs. The Company authorizes such parties to make such payments directly to PanLabs and to rely on notice from PanLabs without further inquiry. PanLabs may demand and take all necessary or desirable steps to collect such Collateral in either PanLabs's or the Company's, name, with the right to enforce, compromise, settle, or discharge

any of the foregoing. PanLabs may endorse the Company's name on any checks, commercial paper, instruments, and the like pertaining to the foregoing.

PanLabs shall not be responsible to the Company for loss or damage resulting from PanLabs's failure to enforce or collect any Collateral or any monies due or to become due under any Liability of the Company to PanLabs. PanLabs shall have no obligation to take, and Company shall have the sole responsibility for taking, any and all steps to preserve rights against any and all prior parties to any Collateral, whether or not in PanLabs's possession.

After an Event of Default, the Company (i) will make no change in any account (or the contract underlying such account), chattel paper, or general intangible, and (ii) shall receive as the sole property of PanLabs and hold in trust for PanLabs all monies, checks, notes, drafts, and other property (collectively called "items of payment") representing the proceeds of any Collateral. After an Event of Default, PanLabs may but shall be under no obligation to: (a) notify all appropriate parties that the Collateral, or any part thereof, has been assigned to PanLabs; (b) collect any or all accounts, chattel paper or general intangibles in the Company's name, apply any such collections against such Liabilities as PanLabs may select; (c) take control of any cash or non-cash proceeds of any item of the Collateral; (d) compromise, extend or renew any account, chattel paper, general intangible document, or deal with the same as PanLabs may deem advisable; and (e) make exchanges, substitutions or surrender of items compromising the Collateral.

The rights of PanLabs are cumulative, and PanLabs may enforce its rights under this Security Agreement irrespective of any other collateral, guaranty, right, or remedy it may have. The exercise of all or a part of PanLabs's rights or remedies hereunder shall not prevent the PanLabs from exercising at the same or any other time any other right or remedy with respect to the Liabilities. The Company authorizes PanLabs in its sole discretion to direct the order or manner of the disposition of the Collateral.

From the proceeds realized from the Collateral PanLabs shall be entitled to retain all sums secured hereby as well as its reasonable expenses of collection including without limitation those of retaking, holding, safeguarding, accounting for, preparing for sale, selling, and reasonable attorneys' fees and legal expenses. If the proceeds realized from the Collateral are not sufficient to defray said expenses and to satisfy the balance due on the Liabilities, the Company shall remain liable for such expenses and any deficiency with respect to the Liabilities. Any payments or proceeds from realization on the Collateral may be applied to the Liabilities in whatever order or manner the PanLabs elects.

11. Continuing Agreement, Termination. This is a continuing Agreement,

and no notice of the creation or existence of the Liabilities, renewal, extension or modification thereof need be given to Company. This security interest shall continue in effect notwithstanding that from time to time no Liabilities may exist. This Security Agreement may be terminated only (i) by a written agreement of PanLabs, or (ii) upon written request of the Company at such time as the Liabilities have been satisfied in full.

12. No Waiver. The Company agrees that no representation, promise, or

agreement made by PanLabs, at, prior, or subsequent to the execution and

delivery of this Security Agreement shall modify, alter, limit, or otherwise abridge the rights and remedies of PanLabs hereunder unless agreed by PanLabs in writing. None of the rights and remedies of PanLabs hereunder shall be modified, altered, limited, or otherwise abridged or waived by any representation, promise, or agreement hereafter made or by any course of conduct hereafter pursued by PanLabs. No delay or omission on the part of the PanLabs in exercising any right hereunder shall operate as a waiver of such right or of any other right under this Security Agreement, and waiver of any right shall not be deemed waiver of any other right unless expressly agreed by PanLabs in writing.

13. Subordination. Notwithstanding anything to the contrary contained

herein, the security interest herein granted, and all rights and remedies of PanLabs and its successors and assigns hereunder or in connection with this Security Agreement, are and shall be subject and subordinate and junior to all Senior Indebtedness, any and all liens and security interests securing any Senior Indebtedness, and the rights and remedies of the holders of any Senior Indebtedness or of any collateral security or guarantees of any Senior Indebtedness, as provided in the Purchase Agreement and Note. In the case of Corestates Bank, N.A. ("Corestates"), the terms and conditions of subordination of the Senior Indebtedness to Corestates are set forth in the Subordination Agreement, dated March 16, 1998, by and among, the Company, the PanLabs and Corestates.

14. Governing Law. This Security Agreement shall be shall be deemed to be

a contract made under the laws of the State of Delaware and for all purposes shall be construed in accordance with the laws of said State without giving effect to the rules of said State governing the conflicts of laws.

15. Counterparts. This Security Agreement may be executed in two or more

counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

16. Titles and Subtitles. The titles and subtitles used in this Security

Agreement are used for convenience only and are not to be considered in construing or interpreting this Security Agreement.

17. Notices. Any notice required or permitted under this Security

Agreement shall be given in writing and shall be deemed effectively given upon (a) personal delivery to the person to be notified (b) 7 days after deposit with a domestic Post Office, by registered mail, postage prepaid and

addressed to the person to be notified at the address indicated for such person below, or at such other address as such person may designate by advance written notice to the other party or (c) confirmed transmission by electronic facsimile to the fax number specified for such person below or such other number as such person may designate by advance written notice to the other party.

<TABLE>

<S>

(1) If to the Company, to:

<C>

With a copy to:

Chrysalis International Corporation
575 Route 28
Raritan, New Jersey 08869
Fax: (908) 722-6677
Attention: John Cooper

Jones, Day, Reavis & Pogue
North Point, 901 Lakeside Avenue
Cleveland, Ohio 44114
Fax: (216) 579-0212
Attention: Thomas C. Daniels, Esq.

(2) If to the Purchaser, to:

With a copy to:

PanLabs International, Inc.
c/o MDS Inc.
100 International Boulevard
Etobicoke, Ontario, Canada M9W 6J6
Fax: (416) 675-4095
Attention: Vice President, Legal Affairs

Harris Beach & Wilcox, LLP
130 East Main Street
Rochester, New York 14604
Fax: (716) 232-6925
Attention: Thomas E. Willett, Esq.

</TABLE>

18. Entire Agreement. This Security Agreement, together with the Note and

the Purchase Agreement and the other documents delivered pursuant hereto
constitute the full and entire understanding and agreement between the Parties
with regard to the subjects hereof and thereof.

19. Severability. If one or more provisions of this Security Agreement

are held to be unenforceable under applicable law, such provision shall be
excluded from this Security Agreement and the balance of this Security Agreement
shall be interpreted as if such provision were so excluded and shall be
enforceable in accordance with its term.

IN WITNESS WHEREOF, the Company has caused this Security Agreement to be
executed by a duly authorized representative as of the date and year first above
written.

CHRYSALIS INTERNATIONAL CORPORATION

By: /s/ John G. Cooper

Name: John G. Cooper

Title: Senior Vice President & Chief
Financial Officer

Accepted and acknowledged as of
the 16th day of March, 1998 by

PANLABS INTERNATIONAL, INC.

By: /s/ Peter E. Brent

Name: Peter E. Brent

Title: Director & Assistant Secretary
