

### **ADHESIVES & COATINGS FOR FLEXIBLE PACKAGING INDUSTRY**

#### **LAMINATION ADHESIVES**

- Acrylic Water Based
- PU Solvent Free Mono & Bi-Component
- PU Solvent Based

#### PRESSURE SENSITIVE ADHESIVES

- Holograms
- BOPP Tapes
- Label Stocks

#### OTHER HOTMELT ADHESIVES

- Side Sealing of WPP & Raffia Bags
- Lamination Wax For WAD Application
- Toffee Twist Wrapping
- Soap Wrapper Coating

#### TRANSFER METALLIZATION ADHESIVES

- Water Based
- Solvent Based

#### **COATINGS**

- Heat Seal Water Based (Al-Foil to Al-Foil)
- Water Proof Barrier Coatings For Paper Cups
   & Allied Segments
- UV Varnish
- Solvent Based Coatings
- Release & Primer Coatings
- Cold Seal Coatings





With 33 years of experience in Global Supplies, Chemline is one of the unique Indian Companies manufacturing wide range of Adhesives & Coatings for Flexible Packaging Industry. It has proven its leadership in number of segments in Indian and Overseas Markets, which includes PU Lamination Adhesives (Solvent Less & Solvent Based), Water based Adhesives, Water Based Heat Seal Coatings, UV Coatings, Top Coats, Hot-Melt for Side Sealing of WPP Bags, Waxes for WAD Application among others.



# **CHEMIFLEX**<sup>®</sup>

#### **LAMINATION ADHESIVES**



Chemline manufactures full range of Solvent free & Solvent Based Polyurethane Adhesives under the brand name CHEMIFLEX, which are successfully running on machines like Nordmeccanica, Expert, Pelican, Futura, Kohli, Narendra etc.

#### **SOLVENT FREE PU LAMINATION ADHESIVE**

#### • Bi-Component Adhesive



Product	Grade	Viscosity, cps	Solids %	Application	Specific Advantages
SOLVENT FREE BI-COMPONENT	CPU 100 BC (NCO)	3000 <u>+</u> 1000, 40 0C	100%	For general to medium performance applications.      Used in the Ratio of 100:60 parts for LLDPE & 100:70 parts for metallized films on High Speed Machines.	Best suited for Food Packaging.     Gives Good Bond Strength with Speckling     Free Result.     Good Heat Sealing & Resistance Properties.
PU LAMINATION ADHESIVES	CPU 100 BC (OH)	1000 <u>+</u> 200, 25 0C	100%	- For making laminates of films like Al Foil, PET, BOPP, LDPE, CPP, MET BOPP, MET PET, MET CPP etc.	- Formulated as per FDA Regulations.  - Suitable for lamination of light color printed substrates with MET-PET.

# Mono-Component Adhesive

Product	Grade	Viscosity, cps	Solids % Application		Specific Advantages
MONO-COMPONENT SOLVENT FREE PU LAMINATION ADHESIVES	CPU 100 M (12)	1200 <u>+</u> 400, 80 °C	100%	- Lamination of Paper To Al Foil / Various Films like PET, MET PET, CPP etc.	- Cures with Presence of Moisture within 24-40 hrs.  - Suitable for Lamination at High Speeds.

# SOLVENT BASED PU LAMINATION ADHESIVE



Product	Grade Application		Viscosity @ 25 °C	Solids %	Specific Advantages
	CPU-60(NCO)	Retort Grade	600 ± 200 cps	60 ± 2	- Suitable for hot filling applications like Ketchups & Aggressive Products
	CPU-50(OH)	Mixing Ratio - 100:4	15 ± 2 sec	50 ± 1	like shampoo, spices etc.
SOLVENT BASE	CPU-66	Medium Performance	6000 ± 1000 cps	66 ± 1	- Suitable for Aggressive Products like shampoo, spices etc.
POLYURETHANE LAMINATION ADHESIVE	HD-50	Mixing Ratio - 100:15	16 ± 2 sec	50 ± 1	- Can be Used in General purpose application at low coating weights with higher mileage.
	CPU-80	General Performance	9000 ± 1000 cps	80 ± 2	
	HD-75	Mixing Ratio - 100:15 for HDPE/LDPE films, 100:12 for Metalize films	1200 ± 300 cps	75 ± 2	<ul><li>- Best Suited for food packaging.</li><li>- Formulated As per FDA Regulations</li></ul>



#### **ACRYLIC WATER BASED LAMINATION ADHESIVES**

- Provides excellent bonding of Al-Foil, PET, MET PET, MET BOPP, PVC, BOPP, CPP with Paper.
- Used for making Liners, Gutkha/Pan Masala Pouches, Non-tearable paper etc.



Product	Grade	Viscosity	Solids %	рН	Application	Specific Advantages
ADHESIVES FOR	DL 4509 N	17 <u>+</u> 2 secs	42 <u>+</u> 2.0	7.0 <u>+</u> 0.5	For Lamination Of Paper to Aluminum foil at High Speed of > 200 mtr/min	- Results into Better Heat Resistance of Laminates Faster bond formation
DRY & WET	DL 4509 (N 24)	17 <u>+</u> 2 secs	42 <u>+</u> 2.0	8.0 <u>+</u> 0.5	For Lamination of Films like PET, MCPP, BOPP, PET, MET PET AL FOIL TO PAPER	Performs better at pouching speeds of > 3000 pouches/min
GRAVURE COATING MACHINES	DL 4509 (N 12)	30 <u>+</u> 5 cps	34 <u>+</u> 2.0	6.0 <u>+</u> 1.0	At High Speed Of 200mtr/min	- Application System can be cleaned by use of water. Improves Heat Resistance
	HD 300 (Hardener)	300 <u>+</u> 100 cps	70 <u>+</u> 1.0	9.0 <u>+</u> 0.5	2% to be Mixed with Adhesive.	of Laminates.

# ULTRAGLOSS® & CHEMIGLOSS®

#### **COATINGS**

- Benzophenone free UV Coating.
- Excellent Gloss and Scuff Resistance.
- Low Migration Property.
- Fast curing and Good Heat Resistivity.
- No Foaming at high speed and provides Colorless coating without any yellow tinge on coated paper.
- UV Coating is preferable for Offline UV Coater, while solvent based OPV Coating can be done online while printing.

#### **UV/OVER PRINT COATINGS FOR PAPER**

Product	Grade	Viscosity, at 25°C	Scuff @ 2 lbs/sq (Revolutions)	. Gloss at 60°C by Novo Meter	
UV COATING FOR OFFLINE APPLICATION	UVF 400 L 303	40 <u>+</u> 5 sec.	Approx. 800 (On Printed paper) Approx. 400 (On Al. Foil)		- Good HR properties. - Odorless UV for all types of papers with
	UVF 400 L 40	40 <u>+</u> 10 sec.	Approx. 500 (On Printer paper)		good gloss. - No Residual Tack. - No Foaming at High Speeds of 150 mtr/min.
SOLVENT BASED OVER PRINT COATING	OPV S 25 (N)	35 <u>+</u> 5 sec.	-		- Good Anchoring on all types of printed paper.

# AQUASEAL® & CHEMISEAL®

#### **WATER & SOLVENT BASED HEAT SEAL COATING**

- Environment Friendly as it is Water Based
- For Al-Foil to Al-Foil Sealing.
- Can be applied by Normal Gravure Coater.
- Goods Sealability between wide range of tempatures



Product	Grade	Viscosity, at 25°C	Solids %	Application	Specific Advantages
HEAT SEAL LACQUER FOR AL FOIL TO	HT 3600 (48)	22 <u>+</u> 3 secs	48 <u>+</u> 2	Water based heat seal coating     Al Foil to Al Foil Sealing	<ul> <li>Suited for High Speed Sealing of Pouches.</li> <li>Suited for making pharma blisters</li> <li>Good Sealing Properties at 150-200 °C</li> <li>No Blocking Good Sealing At 110-120°C @</li> <li>Pressure 3.0 to 4.0 kg /cm for 0.1 sec</li> </ul>
AL FOIL & PAPER TO PAPER SEALING	CHSL 30F3	70 <u>+</u> 10 secs	23 <u>+</u> 2	<ul> <li>Solvent based heat seal coating</li> </ul>	-Good Sealing Strength in Al Foil To Al Foil & Paper To Paper Sealing

# **CHEMICRYL**®

### ADHESIVE FOR TRANSFER METALLIZATION

Product	Grade	Viscosity, secs at 25 °C	Solids %	рН	Application	Specific Advantages
Adhesive For Wet Lamination on Gravure coating Machine	DL 5202(MT)	27±3	45 <u>+</u> 2	8 <u>+0.5</u>	Suitable For Metal Transfer (polyester) To Paper /paper Board From Metallized Polyester.	- COMPLETE METAL TRANSFER - LOW ODOUR - NON TOXIC - NON POLLUTING - FREE FROM ANY SOLVENT

# **CHEMICOAT**<sup>®</sup> & AQUACOAT

# CHEMICOAT ERLEASE LACQUER / AQUACOAT PRIMER COATING

- Good for Release Coating of PET Films for Transfer Metalization, Holography & Printing to Paper.
- Primer Coating for PET and Paper for Direct Metallization.
- Primer Coating also enables MET-PET Films to Print UV Ink over its surface.

Product	Grade	Viscosity, secs at 25 °C	Solids %	рН	Application	Specific Advantages
RELEASE LACQUER	RC 30	30-35	24 <u>+</u> 2.0	-	Coating on PET Film for Transfer Metalization & Transfer Printing.	Good Releasing Property.     Compatible for UV ink printing after transfer.
PRIMER FOR PET & PAPER	MPP 4030	30-35	41 <u>+</u> 2.0	8.0 <u>+</u> 0.5	Metallization Primer for Paper & PET Film	Base coat for PET/Paper for Permanent Metallization     Primer for Printing UV Ink on MET PET Films





### **CHEMISEAL**®

#### **COATING FOR HOT FOIL STAMPING**

• Hot Stamping Foil Coating gives Good Bonding with PVC Cards, Coated Paper and other Substrates.

Product	Grade	Viscosity, at 25°C	Solids %	Application	Specific Advantages
HOT FOIL STAMPING COATING	HSF 25	20 <u>+</u> 5 secs	20 <u>+</u> 1	Stamping Condition 110-170 C for 3-5 secs at pressure of 2-2.5 Kg/cm2	Provide Complete Transfer in Holograms & Transparent Appearance after Drying.

# **QUIKLOCK**®

### HOTMELT ADHESIVES FOR HOT FOIL STAMPING

Product	Grade	Viscosity cps, at 150°C	Gluepot Temp. (°C)	Softening (°C)	Application	Specific Advantages	
HOTMELT ADHESIVE FOR HOT FOIL	CH 150	5000 <u>+</u> 1000	140-160	80 <u>+</u> 5	Hot Foil Stamping	-Minimal Fumes / Odour -Can be Ambient with Solvent	
STAMPING	CH 150F	4500 <u>+</u> 1000	140-160	92+3		Based and Water Based Adhesive	

# <u>AQUACOAT</u>®

### **BARRIER COATINGS FOR FOOD PACKAGING**







**Burger Boxes** 



Pizza Boxes



Paper Plates

Product	Grade	Viscosity, at 25°C	Solids %	Application	Specific Advantages
WATER BASED BARRIER COATING	WPC 4502	30 <u>+</u> 5 secs	50 <u>+</u> 1	Paper and Paper Board For Cups	- Excellent Water repellency -Good Resistance To Oil and Grease -Water Based, Pollution free and
NON SEALABLE WATER BASED BARRIER COATING	WPC 4502 NS	30 <u>+</u> 5 secs	30 <u>+</u> 2.0	and Allied Products	Eco Friendly -No Organic Solvent -Economical

# **QUIKLOCK**®

# HOTMELT ADHESIVES FOR SIDE SEALING OF WPP/RAFFIA BAGS







Product	Grade	Peel Strength	Viscosity cps, at 150°C	Gluepot Temp. (°C)	Softening (°C)	Application	Specific Advantages
HOTMELT ADHESIVE	CH 9028 SSH(9)	Machine Direction: 15-20 N/cm	50,000 <u>+</u> 5000	170-190	108 <u>+</u> 3	For Side Sealing of Woven	- Strong bonding between PP to PP.  - Passes minimum of 10 drops (25 Kg. sand bags at 6 - 8 ft. height)
FOR SIDE SEALING OF WPP BAGS	CH 9028 SSH(12	Cross Direction: <sup>(3)</sup> 20-24 N/cm.	45,000 <u>+</u> 5000	170-190	115 <u>+5</u>	Polyproplene, HDPE Bags through Nozzle Application.	<ul><li> Quick Bond Formation giving Higher Production Speeds.</li><li> Good Heat Resistivity.</li><li> Better Mileage.</li></ul>

# WAXES & WADS





Product	Grade	Viscosity at 150°C	Gluepot Temp. (°C)	Softening Temp.	Application	Specific Advantages
Lamination wax For induction Sealing for wad	CH 800 W	100 <u>+</u> 20 cps	120-150	103 <u>+</u> 5	<ul> <li>For Lamination         of Al Foil with         Paper/ Board         for WAD making.</li> <li>Can be used         separately or in         combination as         per desired         results.</li> </ul>	- Good Heat Resistance up to 50°C - Formulated as per FDA Regulations.
	CH 800 W 21(H)	50 <u>+</u> 20 cps	130-150	104 <u>+</u> 3		- Suitable for Extreme Hot Weather Conditions.
	CH 800 W 9(H)	30 <u>+</u> 20 cps	120-150	75 <u>+</u> 2		- Easy absorption while induction sealing process & provide clear de-lamination
	CH 800 W 15(H)	30 <u>+</u> 20 cps	120-150	75 <u>+</u> 2		without any spots.  - Good heat resistance at high Temperature
	CH 800 W 6(H)	40 <u>+</u> 20 cps	110-130	77 <u>+</u> 2		up to 60°C

# Toffee Wrapping & Butter Packaging







Product	Grade	Viscosity at 150°C	Gluepot Temp. (°C)	Softening Temp. (°C)	Application	Specific Advantages
WAX COATING FOR PAPER/	PCW 104	1200 <u>+</u> 300 cps	140-160	105 <u>+</u> 3	In Paper Coating for Food Packaging	- Moisture Impermeable Characteristics - Formulated as per FDA Regulations.
TOFFEE TWIST WRAPPER	PCW 85	1200 <u>+</u> 300 cps	140-160	82 <u>+</u> 2	& Toffee Twist Wrapper	
LAMINATION WAX (AL-FOIL / GLASSINE)	CH 850 LY	40 <u>+</u> 10 cps at 100 OC	120-130	75 <u>+</u> 5	For Butter packaging	- Oil & Water Resistant - Formulated as per FDA Regulations.
	CH 850 LW	40 <u>+</u> 10 cps at 100 OC	120-130	75 <u>+</u> 5	TOI DULLER PACKAGIIIG	

### Soap Wrappers



Product	Grade	Viscosity at 150°C	Gluepot Temp. (°C)	Softening Temp. (°C)	Application	Specific Advantages
HOTMELT COATINGS	SWC 25 LH(30)	2500 <u>+</u> 500 cps	125-140	100 <u>+</u> 5	For Inner Coating & Heat Sealing	- Seals at Low GSM at High Speeds Stable at Extreme Hot or
	SWC 25 LH(3)	1500 <u>+</u> 500 cps	125-140	80 <u>+</u> 5	of Soap & Chocolate Wrappers and Chewing-gum Wrapper	Cold Environment Formulated as per FDA Regulations.

Product	Grade	Viscosity, at 25°C	Solids %	рН	Application	Specific Advantages
Water Based Pigmented Lamination Adhesive for Paper/Pet	DL 4509N18 (W) (Pigmented)	16 <u>+</u> 2 secs	46 <u>+</u> 2	7.5 <u>+</u> 0.5	Ready to use Single Component Adhesive For lamination of Printed PET With Paper.	- Economical and Eco friendly.     - White Pigmented Adhesive Reduces the use of White Ink.     - Eliminates the Use of Solvents.     - Power Consumption is Low During Production.
Solvent Based Pigmented Lamination Adhesive for Paper/Pet	CPU 80 (W) (Pigmented)	11000 <u>+</u> 2000 CPS	85 <u>+</u> 2	_	Two Component Solvent Based Adhesive for Lamination of printed Pet With Paper	Eliminate White Ink Consumption.     Cross Linked Film is Transparent & Practically Odourless.     Eliminates Speckling Problem

# CHEMISEAL® & AQUASEAL®

#### **AQUASEAL - COLD SEAL COATING**





- Most suitable for Chocolate Wrapping.
- Completely suitable for Direct Food Contact Packaging.
- Gives instant Sealing on Coated to Coated Surface without any Heat Application.

	Product	Grade	Viscosity, at 25°C	Solids %	рН	Application	Specific Advantages
- 1	COLD SEAL COATING FOR CHOCOLATE WRAPPERS	CSC 4311	2000 <u>+</u> 500 cps	39 <u>+</u> 1	8.5 <u>+</u> 1	Coating on Inner Surface of the Plain/Metalized PET, BOPP, Paper or Board.	- Instant Spaling on Lingted to Lingted Surface

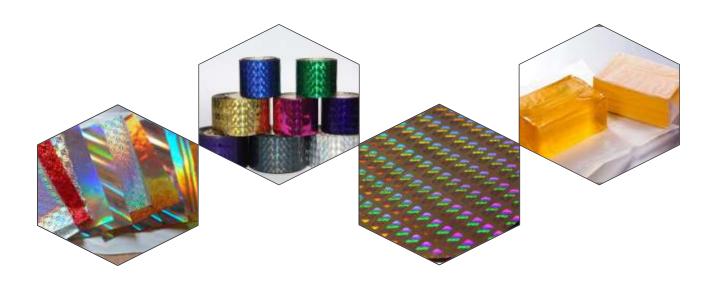
### **CHEMIBIND**®

#### **ACRYLIC CO-POLYMER RESIN POWDER**

Product	Grade	Bulk Density (Secs)	Mixing Ratio	Viscosity (25% Solids)	Gloss	Application
	CR 40 TC	0.45 <u>+</u> 0.05	25 PARTS RESIN WITH 75 PARTS EA	22 <u>+</u> 5 secs	45-65%	Topcoat for all types of Printed Paper for Gravure Coating Machines.
ACRYLIC CO-POLYMER RESIN POWDER	CR 40 IB	0.45 <u>+</u> 0.05	2-3% IN VINYL INKS MANUFACTURING			Used as Ink Binder in Gravure Inks and can replace Degalan P24 which is a binder.
	CR 40 HS	0.45 <u>+</u> 0.05	35 PARTS RESIN WITH 65 PARTS EA	100 <u>+</u> 10 secs		As Heat Seal Coating of Al Foil to Al Foil Sealing.
	CR 40 (4)	0.45 <u>+</u> 0.05	25 PARTS RESIN WITH 75 PARTS EA	45 <u>+</u> 5 secs		As Release Lacquer.

# $\underline{\text{QUIKLOCK}}^{\textcircled{\tiny{\$}}} \, / \, \underline{\text{CHEMICRYL}}^{\textcircled{\tiny{\$}}}$

#### PRESSURE SENSITIVE ADHESIVES



Chemline manufactures wide range of Pressure Sensitive Adhesives suitable for application in BOPP Packaging Tapes, Holographic Labels, Stickers, Label stocks, Protective Films, Envelope Flaps and other Allied uses.

Product	Grade	Viscosity, at 25 °C	рН	Solids%	Application	Specific Advantages
HOTMELT PRESSURE SENSITIVE ADHESIVES	CH 9028 L86 CH 9028 L12FR	18,000 <u>+</u> 4000 c 15000 <u>+</u> 3000 cp			Suitable for Label Stocks Suitable for Holograms.	Quick Bond formation Minimal Odor
WATER BASED PRESSURE SENSITIVE ADHESIVES	PST 52 PST 55 HT	16 <u>+</u> 2 secs 19 <u>+</u> 2 secs	7.0 <u>+</u> 0.5 7.0 <u>+</u> 0.5	52 <u>+</u> 1 54 <u>+</u> 1	Suitable for Self Adhesive BOPP Tape & Holographic Labels.	Good Tack &
	PS 5520 PS 5570	1300 <u>+</u> 200 cps 5000 <u>+</u> 2000 cps	5.0 <u>+</u> 1.0 5.0 <u>+</u> 1.0	52 <u>+</u> 1 54 <u>+</u> 1	Suitable for Stickers, Label Stock & Envelop Flaps	Non Transferable
SOLVENT BASED PRESSURE SENSITIVE ADHESIVE	PS 6520 (S)	2500 <u>+</u> 500 cps	-	50 <u>+</u> 2	Suitable for Medical / Foam / Cloth / HDPE Tapes, Label Stocks & Stickers.	Non-transferable, clear adhesive coating & clean removability.



# **GLOBAL PRESENCE**

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