Inks that impart an exciting dimension to packaging.

A captivating collection of Flexo/Gravure inks from Hindustan Inks.
We are Hindustan Inks & Resins Ltd. (HIRL). A part of the US $250 million Bilakhia Group, which has diverse interests in Printing Inks, Resins, Flushed Pigments and Crop Protection chemicals.

Incorporated as a company in the year 1991, HIRL has achieved leadership status in a very short span of time. Today, we are the largest manufacturer of printing inks in India with multi-locational plants. The creator of a mega single-stream plant for 'seamless' manufacture of inks. We have implemented SAP R3 Solutions to optimise Systems in all areas of operation and market information. Recently we have invested over US $30 million in the creation of world size capacities for Printing Inks, Resins, Flushed Resins.

HIRL recently established Micro Inks Corporation, a company in Chicago, USA, where it manufactures a variety of inks to cater to the large US market. This venture has proved hugely successful with the company making decisive strides and is all set to be amongst the top five players in the US ink industry soon.

At HIRL, our quest is total customer satisfaction. We therefore, are looking for ways and means to delight our customers. Our extensive research and the foresight to match every possible printing need, has resulted in a wide product range. But this is not all. To meet every demand of a valued and discerning customer like you,
The art of packaging is closely connected to the poetry of color.

In fact, it is color, that wraps packaging with personality.

Something, that inspired our spectrum of packaging inks.

Blessed with the gift of infinite color possibilities, the range is superbly compatible with a variety of substrates.

Go ahead.

Indulge your imagination.

Our world class range of premium inks are a result of our company's backward integration into flushed pigments and resins.

That has led to total control over the quality of raw materials, which go a far way in producing inks par excellence.

These versatile inks have intrinsic qualities like high-gloss, fast setting and better dot gain, and can be used on a variety of substrates.

Better reproduction and trouble free performance while printing is thus achieved.

We are sure, you would like to sample our choicest of inks for a satisfying printing experience.
That sleek, magnetic appeal that our inks gift packaging with. Ample reason for heads to turn.
FEAT URES
Excellent printability.
High gloss.
High strength.
Low odour.
Deep freeze oil properties available on request.
Confirms to global standards and specifications.

SUBSTRATES
Can be printed on all types of Polyethylene, Polypropylene, PVC, Metallised Polyester/BOPP, Paper board, Pearlised BOPP.
For Polyethylene and Polypropylene film the treatment should be 38 dynes for good adhesion and optimum resistance properties.

PRINTABILITY
Excellent printability in half tone and good coverage in full tone.
Free from any printing defects such as streaking and scumming etc.
Excellent rub and scratch resistance.

DILUENTS
The inks have a tolerance with a wide range of solvents to accommodate variation in press speed and conditions.

FOR FLEXO
The usual diluent for Multigloss inks is a blend of Isopropyl Alcohol and Butyl Alcohol.
Ink maker’s recommendation should be followed in order to get the best printing and optimum drying under various conditions.

FOR GRAVURE
Recommended diluents is Toulene or blend of Isopropyl Alcohol.
Butyl Alcohol is recommended as retarder.

COLOUR RANGE
Full range of Pantone basic shades including Metallic and ARSR and Light Fast Shades.
The touch of every hue and shade of our inks, to bring that all round depth to packaging.
FEATURES

- Sharp printability.
- High strength.
- Low odour.
- Excellent scuff resistance.
- Deep freeze resistant.
- Confirms to global standards and specifications.

SUBSTRATES

Can be printed on Metallised /Pearlised BOPP, Poster paper, Aluminium Foil and Coextruded Polypropylene film. Film treatment should be 38 dynes for good adhesion and optimum resistance properties. These inks can also be used for lamination.

PRINTABILITY

- Excellent printability in half tone and good coverage in full tone.
- Free from any printing defects such as streaking and scumming etc.
- Excellent rub and scratch resistance.

DILUENTS

Ethyl Acetate or a mixture of Ethyl Alcohol and Ethyl Acetate is recommended for diluent. Cellosolve is recommended as a retarder.

COLOUR RANGE

Full range of Pantone basic shades including Light Fast Shades

PRESS RETURNS

Returned inks can be mixed with fresh inks and used.
The energy that flows from the palette of our inks, to add to packaging a truly multi-hued splendour.
FEATURES

Low odour. Deep freeze resistant. Oil resistant. Suitable for various press speed from 50 meters to 300 meters per minute.
Confirms to global standards and specifications

SUBSTRATES

Can be printed on all types of Polyethylene, Polypropylene, Paper and Board, Pearlised BOPP, Metallised PVC,
Polyester, BOPP, and Transparent PVC
For Polyethylene and Polypropylene film the treatment should be 38 dynes for good adhesion and optimum resistance properties.

PRINTABILITY

Excellent printability in half tone and good coverage in full tone.
Free from any printing defects such as streaking and scumming etc.
Excellent rub and scratch resistance.

DILUENTS

The inks have a tolerance with a wide range of solvents to
accommodate variation in press speed and conditions.
A blend of Industrial Ethanol and Ethyl Cellosolve in a proportion of 80 : 20 is recommended.

COLOUR RANGE

Full range of Pantone basic shades including ARSR and Light Fast Shades.
hypnotic

The effect of our color range that defies imagination. Giving packaging looks, best described as arresting.
FEATURES

Sharp printability.
Excellent gloss.
High strength.
Low odour.
pH stable.

Suitable for printing on treated paper such as craft, chromo and various boards.
Confirms to global standards and specifications.

SUBSTRATES

Aquatone : For printing on Metallised paper board, aluminium foil,
Transparent polyester / BOPP for lamination, Chromo Art paper and Board.
Aquaflex : For printing on Craft paper.

PRINTABILITY

Excellent printability and good coverage.
Free from any printing defects.

DILUENTS

Aquatone/ Aquaflex can be adjusted for viscosity with water depending upon the job, anilox screen
and printing speed. If more than 2 to 3% water is needed, ready made diluent should be used.
Excessive water for dilution may cause foaming. Accelerator and Retarder are available for special needs.

COLOUR RANGE

Full range of Pantone basic shades including ARSR and Light Fast Shades.
MAXLAM

Reverse Printing Gravure Lamination Inks
for BOPP and Polyester Films

FEATURES
Excellent printability.
High bond strength.
High productivity.
Very low solvent retention.
Low odour.
Suitable for printing on any kind of packaging including food packaging.
Common for various films.
Suitable for any press speed i.e. Low, Medium and High
ranging from 50 meters to 300 meters per minute.
Confirms to global standards and specifications.

SUBSTRATES
Can be printed on all types of lamination films like Polyester, BOPP, Cellophane, PVC, LD, PP.

PRINTABILITY
Excellent printability in half tone and good coverage in full tone.
Free from any printing defects such as streaking and scumming etc.
Produces a very bright print at low dry film weight
due to high colour strength and low viscosity.

DILUENTS
Mixture of MEK 40%, Toluene 40 % and Isopropanol 20 %

COLOUR RANGE
Full range of Pantone basic shades including Metallic and ARSR and Light Fast Shades

INK PREPARATION
Ink, Medium and Diluent need to be mixed close to 40 : 20: 10 ratio.

SOLVENT RETENTION
Maxlam has shown extremely low solvent retention confirming to
international standards including food packaging.
CIRCULAR C.T. INKS

Flexo Inks with Tape Test for HDPE / PP Woven Sacks

FEATURES

Sharp printability.
Excellent gloss.
High colour strength.
Resistance to alkali and urea.
Good scratch resistance.

Press returns can be used with fresh inks - a step towards low inventory.
Excellent tape test (Adhesion) on corona treated HDPE/PP and non corona PP bags.
Confirms to global standards and specifications.

SUBSTRATES

Can be printed on all types of HDPE / PP Woven sacks.

PRINTABILITY

Excellent printability and good coverage.
Free from any printing defects.
Excellent rub and scratch resistance.

DILUENTS

Recommended ready reducers / alcoholic solvents from HIRL can be used as diluents.

COLOUR RANGE

Full range of Pantone basic shades including AR / UR and Light Fast shades.
The look of class that our inks bring to packaging, ensuring a timeless elegance that says pick me up.
CIRCULAR INKS

Flexo Inks for HDPE / PP Woven Sacks

FEATURES
- Sharp printability.
- Excellent gloss.
- High strength.
- Resistance to alkali and urea
- Good scratch resistance.
- Confirms to global standards and specifications.

SUBSTRATES
- Can be printed on all types of HDPE / PP Woven sacks.

PRINTABILITY
- Excellent printability and good coverage.
- Free from any printing defects.
- Excellent rub and scratch resistance.

DILUENTS
- Recommended ready reducers / alcoholic solvents from HIRL can be used as diluents.

COLOUR RANGE
- Full range of Pantone basic shades including AR / UR and Light Fast Shades.

OTHER BRANDS
- Polar inks and cement inks.
- Polar inks are economical versions of circular inks.
- Cement inks do not have urea resistance property but has good gloss and nail resistance.
- Diluents to be used are same as that of circular inks.
# SOLVENT BASED POLYURETHANE ADHESIVES

### Product Specification

<table>
<thead>
<tr>
<th>Description</th>
<th>Product</th>
<th>Solvent based two component polyurethane adhesive.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hibond 680</td>
<td>Lamination of Polyester, Polyethylene, Gellaphane, BOPP, Aluminum Foil and various types of paper.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Odourless once dried, Colourless to Pale Yellow, Viscosity 1200-1500 cps, Solid content 80±2%</td>
</tr>
<tr>
<td></td>
<td>Hibond 660</td>
<td>Lamination of Polyester, Polyethylene, Gellaphane, BOPP, Aluminum Foil and various types of paper.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Odourless once dried, Colourless to Pale Yellow, Viscosity 1000-1400 cps, Solid content 60±2%</td>
</tr>
<tr>
<td></td>
<td>HB 200</td>
<td>Hardener (Curing agent for adhesives)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Odourless once dried, Colourless to Pale Yellow, Viscosity 700-1400 cps, Solid content 50±2%</td>
</tr>
</tbody>
</table>

### Dilutions

<table>
<thead>
<tr>
<th>Solid content(%)</th>
<th>Hibond 680</th>
<th>Ethyl Acetate</th>
<th>Viscosity FDD'Sec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>100</td>
<td>220</td>
<td>14-15</td>
</tr>
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<td>100</td>
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<td>18-17</td>
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<td>100</td>
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<tr>
<td>40</td>
<td>100</td>
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<td>20-22</td>
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<table>
<thead>
<tr>
<th>Solid content(%)</th>
<th>Hibond 660</th>
<th>Ethyl Acetate</th>
<th>Viscosity FDD'Sec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>100</td>
<td>100</td>
<td>14-15</td>
</tr>
<tr>
<td>30</td>
<td>100</td>
<td>100</td>
<td>18-20</td>
</tr>
<tr>
<td>35</td>
<td>100</td>
<td>71</td>
<td>22-24</td>
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</table>

### LAMINATION PROPERTIES

<table>
<thead>
<tr>
<th>Lamination</th>
<th>Description</th>
<th>Application</th>
<th>Solid content</th>
<th>Viscosity</th>
<th>Odour</th>
<th>Specific gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester, Polyethylene, Cellophane, BOPP, Aluminium Foil and various types of paper.</td>
<td>Odourless once dried, Colourless to Pale Yellow</td>
<td>Viscosity 1200-1500 cps, Solid content 80±2%</td>
<td></td>
<td></td>
<td>1.08 g/cm³</td>
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</tr>
<tr>
<td>BOPP, Aluminium Foil</td>
<td>Odourless once dried, Colourless to Pale Yellow</td>
<td>Viscosity 1000-1400 cps, Solid content 60±2%</td>
<td></td>
<td></td>
<td>1.06 g/cm³</td>
<td></td>
</tr>
</tbody>
</table>

### Processing

- To be applied at a solid content of 25-40% for Hibond 680 and 25-40% for Hibond 660.
- To be applied at a solid content of 25-35% for HB 200.

### Application

- Solvents: Ethyl Acetate.
- Other diluents: Acetone, MEK with a maximum water content of 0.1%.

### POT LIFE

- For normal applications, the dry coating wt should be 2.5±0.5 gsm. However, for specified applications like paper, leatheroid paper etc., a slightly higher coating weight is recommended.
- The pot life of the mixed adhesive is 12 to 14 hours depending on the temperature and the quantity of the mixture.

### Cleaning

- The application system of the equipment should be cleaned with solvents after every operation. Special care should be taken to avoid adhesives drying and curing in the cells of the gravure application cylinder.

### Storage

- Hibond adhesives can be stored for at least 6 months from the date of manufacture at ambient temperature up to 25°C in closed original container.

### Storage

- Hibond adhesives can be stored for at least 6 months from the date of manufacture at ambient temperature up to 25°C in closed original container.
### APPLICATION CHART FOR FLEXO / GRAVURE INKS

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>Multigloss</th>
<th>Dynaflex</th>
<th>Hiflon</th>
<th>Polyfresh</th>
<th>Aquatone / Aquaflex</th>
<th>Maxlam</th>
<th>Circular CT</th>
<th>Circular</th>
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<tbody>
<tr>
<td>FLEXO</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>GRAVURE</td>
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### SUBSTRATES

<table>
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<tr>
<th>Material</th>
<th>Multigloss</th>
<th>Dynaflex</th>
<th>Hiflon</th>
<th>Polyfresh</th>
<th>Aquatone / Aquaflex</th>
<th>Maxlam</th>
<th>Circular CT</th>
<th>Circular</th>
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</thead>
<tbody>
<tr>
<td>Metallised PVC</td>
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<td></td>
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<td></td>
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<tr>
<td>Metallised Polyester</td>
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<td></td>
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<tr>
<td>Metallised BOPP</td>
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<tr>
<td>Metallised Paper Board</td>
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<td>Trans. PVC</td>
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<tr>
<td>Poster Paper</td>
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<tr>
<td>Craft Paper</td>
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<tr>
<td>Chromo Art Paper</td>
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<tr>
<td>Pearilised BOPP</td>
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<tr>
<td>Aluminium Foil</td>
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<td>Poly Coated Board</td>
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### DILUENTS / REDUCER

<table>
<thead>
<tr>
<th>Solvent Type</th>
<th>Multigloss</th>
<th>Dynaflex</th>
<th>Hiflon</th>
<th>Polyfresh</th>
<th>Aquatone / Aquaflex</th>
<th>Maxlam</th>
<th>Circular CT</th>
<th>Circular</th>
</tr>
</thead>
<tbody>
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<td>★</td>
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<td>Ketonic Solvents</td>
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<tr>
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<td>Water</td>
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</tbody>
</table>
Our Product Range

Printing Inks
- Flexo / Gravure Inks
  - Solvent Based
  - Surface Printing
  - Lamination Printing
  - Water Based
- PU Adhesives (Solvent Based)
- Offset Inks
  - Sheetfed
  - Web Offset
- Screen Inks
- U.V. Products
  - U.V. Coatings
  - U.V. Inks
  - Offset
  - Flexo

Pigments/Flushes
- AzoCoIors
- Phthalocyanine Blue
- Alkali Blue

SyntheticResins
- For Offset Inks
- For Liquid Inks

Ink Vehicles

WaxCompounds

Pre-DispersedPigments
- PVB Based
- MetalResinateBased
Micro Inks Corporation set up in USA, is the first step towards establishing a powerful global presence by Hindustan Inks & Resins Limited.

A manufacturing site spread over 44 acres at Kankakee near Chicago, is where Micro Inks creates a variety of inks viz. Web Heat-set inks, News colors and Black inks, Sheetfed inks Publication Gravure inks and many more.

This captivating collection of fine inks has found growing acceptance in the US printing industry.

Steering the progress at Micro Inks is its handpicked team of experienced and qualified personnel, with a keen eye on quality and innovation to provide a competitive edge to its esteemed customers.

With an enviable order position and long term contracts, Micro Inks is all set to be amongst the top five in the US ink industry.

It is a splendid success story of Hindustan Inks and its prowess in manufacturing and marketing quality inks.
Our Facilities

R&D Centre - Daman

Resins Plant - Vapi

R&D Laboratory

Alkali Blue Plant - Vapi

Alkali Blue Plant - Vapi (inside view)

Inks Plant - Silvassa
The data provided is based on our present state of knowledge and is intended to provide general information about our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our General Conditions of Sale.

For International Markets

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Bilakhia House, Multanand Marg,
Chalta, Vapi - 396 191. Gujarat, India.
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Fax : +91- 0260 - 2463733.
Website - www.hindustaninks.com

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Satkar Plaza, J.B. Nagar,
Andheri (E), Mumbai, India.
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Fax : +91 - 22 - 28232233
e-mail : info@hindustaninks.com

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Micro Inks Corporation
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Suite 1000, Schaumburg,
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Tel : +1 847 969 1800
Fax : +1 847 944 2957

For Domestic Markets

Mumbai - Regional Office :
118, Apollo Estate,
Mogra Lane, Andheri (E),
Mumbai - 400 069, India.
Tel : 28313693, 28379641.
Fax : 28379660.

Noida - Regional Office :
C-13, Sector 3, Phase -I,
Noida - 201301 (U.P)
Tel : 01194-519771/234/56.
Fax : 01194-519424.

Kolkata - Regional Office :
9, Transport Depot Road,
Kolkata - 88
Tel : 033-4498514 / 35 / 36.
Fax : 033-4498551.

Chennai - Regional Office :
No. 13, Patilus Road,
Mount Road,
Chennai - 2.
Tel : 044-6588113.
Fax : 044-6522248.

Bangalore Branch :
FS, Naveen Apartment, 10,
10th Main, Off. Palavsa Road,
Vasanth Nagar,
Bangalore - 560 032.
Tel : 080-2262677.

Ahmedabad Branch :
Pilot No. 141B,
Phase III, GIDC,
Vatva, Ahmedabad
Tel : 079-5834849 / 583480
Fax : 079-5834801
Tel : 079-5830494

Baroda Branch :
716, Siddhivinayak,
New Hotel Express,
R. C. Dutt Road,
Avalaup, Baroda,
Tel : 0265-3059687.
Fax : 0265-350365.

Hyderabad Branch :
4 & 5, Rascalaya,
Behind Usha Godown,
Secunderabad - 300 003.
Tel : 040-7903399.
Fax : 040-790410.

For International Markets

Manufacturing & Technical Center
2850 Festival Drive,
Kirkwood, IL 63360.
Tel : +1 815 929 9293
Fax : +1 815 929 9298

For Domestic Markets

Delhi Branch :
413, Patpargunj Indl. Estate
New Delhi-110 092.
Tel : 011-2141913 / 214016.
Fax : 011-2143169.

Sivakasi Branch :
32, Police Station Street,
Sivakasi - 626 123,
Tamil Nadu.
Tel : 04562-420817.