

Medium Soft acrylic binder

Specification

Composition : Poly acrylate dispersion

Aspect : White to off white liquid

Solid content : $27 \pm 2.0 \%$

Charge : Anionic

pH of 10 % emulsion : 6.0 – 8.0

Film property : Medium soft film

Solubility : Water Soluble

Salient feature

- Medium soft resin binder, with coverinh FILm
- Good covering without loading the grain
- Can be combined with H BIND 32 to get compact grain and covering

Mode of application

• Suitable for shoe upper, garments and leather goods

Use level of **H BIND 31** may vary from 100 – 150 parts per litre depends on the finishes.



Soft acrylic resin binder

Specification

Composition : Poly acrylate dispersion

Aspect : White to off white emulsion

Solid content : $25 \pm 2.0 \%$

Charge : Anionic

pH of 10 % emulsion :6.0 – 8.0

Film property : Soft film

Solubility : Water Soluble

Salient feature

- Soft resin binder, with low tackiness
- Gives fine grain break
- Suitable for shoe nappa and upper
- Can be combined with H BIND 31 to increase the coverage

Mode of application

• Suitable for shoe upper, and nappa leathers

Use level of **H BIND 32** may vary from 100 – 150 parts per litre depends on the finishes



Medium Soft High Covering binder

Specification

Composition : Acrylic Emulsion

Aspect : Milky White Emulsion

Solid content : $35.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 6.0 – 7.5

Film property : Transparent, Medium soft & elastic film

Solubility : Water Soluble

Salient feature

- Medium soft elastic & flexible film
- Non tacky
- Good Covering power, so useful, where good grain correction is required
- Good adhesion and particularly suitable for base coat formulation

- **H BIND 35** can be used alone in case of low selection corrected grain Leather
- The performance improves in case of semi-aniline finish with **H BIND 63 /108**
- For Embossed printed shoe upper, it can be used as sole binder or with H BIND 41





Medium Soft High Covering binder

Specification

Composition : Acrylic Emulsion

Aspect : Milky White Emulsion

Solid content : $40.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 6.0 – 7.5

Film property : Transparent, Medium soft & elastic film

Solubility : Water Soluble

Salient feature

- Medium soft elastic & flexible film
- Non tacky
- Good Covering power, so useful, where good grain correction is required
- Good adhesion and particularly suitable for base coat formulation

- **H BIND 41** can be used alone in case of low selection corrected grain Leather
- The performance improves in case of semi-aniline finish with H BIND 63 /108
- For Embossed shoe upper, it can be used as sole binder or with **H BIND 35**



Medium Soft Micro Fine Particle Sized Acrylic binder

Specification

Composition : Acrylic Emulsion

Aspect : Translucent Binder

Solid content : $35.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 5.5 – 6.5

Film property : Transparent, very soft & elastic film

Solubility : Water Soluble

Salient feature

- Medium soft elastic & flexible film
- Non tacky universal binder to be used alone or in combination.
- Excellently useful for Aniline and semi-aniline finish due to Micro-fine particle size
- Improves adhesion, when used alone or in combination, so protects during tape test

- **H BIND 63** can be used alone in case aniline / semi-aniline finish
- Escalated performance when used in semi-aniline finish with H BIND 239 / 108
- For Embossed shoe upper, it can support H BIND 35 / 41 for better adhesion with the substrate



Soft acrylic resin binder

Specification

Composition : Poly acrylate Emulsion

Aspect : White liquid

Solid content : $33 \pm 2.0 \%$

Charge : Anionic

pH of 10 % emulsion : 7.0 - 9.0

Film property : Soft film

Solubility : Water Soluble

Salient feature

- Soft resin binder, has high flex resistance
- Suitable for base coat applications
- Excellent covering properties
- Can be used as base coat along with other auxiliaries

Mode of application

- Can be used for base coat formulation
- Suitable for shoe upper, garments and leather goods

Use level of **H BIND 100** may vary from 100 – 150 parts per litre depends on the finishes



Soft micro binder with uniform ultrafine particle size

Specification

Composition : Acrylic Emulsion

Aspect : Bluish Translucent Liquid

Solid content : $20.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 6.5- 8.0

Film property : Transparent, Soft and Elastic Film

Solubility : Water Soluble

Salient feature

- A very soft , transparent, elastic and flexible film
- Quick drying in nature hence producing non tacky film
- Very good adhesion and particularly suitable for base coat formulation

Mode of application

- H BIND 108 can be used for base coat formulation along with H BIND 115
- Improves the natural look of leather addition to desired up gradation
- **H BIND 108** can be suitable for sheep nappa ,suede nappalan and all other type of Garment finishes

Use level of **H BIND 108** may vary from 50 – 100 parts per litre depending on the finishes



Soft acrylic resin binder with uniform fine particle size

Specification

Composition : Acrylic Emulsion

Aspect : Bluish Translucent Liquid

Solid content : $30 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 6.0 – 7.5

Film property : Transparent, Very Soft & Elastic film

Solubility : Water Soluble

Salient feature

- Very soft resin binder, clear transparent with elastic and flexible film
- Good penetration properties on all types of leather
- Excellent flexibility, high elongation and does not increase the temper of the leather
- Very good adhesion for base coat formulation

Mode of application

- H BIND 115 Can be used for base coat formulation along with the H BIND 108
- **H BIND 115** can be used in the formulations of base coat and surface impregnation of full and corrected grain leathers
- Suitable for sheep nappa, suede nappalan and all other type of garment finishes

Use level of **H BIND 115** may vary from 100 - 150 parts per litre depends on the finishes



Medium Soft Self Cross linkable Acrylic Resin Binder

Specification

Composition : Acrylic Emulsion

Aspect : Milky White

Solid content : $30 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 5.5 – 7.0

Film property : Medium Soft Slightly Tacky Film

Solubility : Water Soluble

Salient feature

- Medium soft resin binder
- · Elastic and flexible film
- Good penetration
- Excellent Mechanical stability
- Very good print retention and plate release
- Excellent flexibility, high elongation and does not increase the temper of the leather
- Very good adhesion for base coat formulation

Mode of application

- H BIND 119 can be used for base coat formulation along with the H BIND 115
- Excellent wet rub and dry rub fastness
- Protein and Wax emulsion can be used along with H BIND 119 to modify its film property
- **H BIND 119 c**an also be used for surface impregnation of full and corrected grain leathers

Use level of **H BIND 119** is 100 - 150 parts per litre



Soft Elastomeric Binder

Specification

Composition : Acrylic Emulsion

Aspect : Milky Translucent

Solid content : $35 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 5.5 – 7.0

Film property : Soft Elastomeric Film

Solubility : Water Soluble

Salient feature

- Soft resin binder
- · Elastic and flexible film
- Good penetration
- Excellent Mechanical stability
- Very good print retention and plate release
- Excellent flexibility, high elongation with bounce back property
- Very good adhesion for base coat formulation

Mode of application

- **H BIND 150** can be used for base coat formulation alone or along with other binders
- Improved adhesion to the substrate
- Due to bounce back film property, it imparts print retention

Use level of **H BIND 150** is 100 – 150 parts per litre





Very soft and thin acrylic resin having uniform fine particle size

Specification

Composition : Acrylic Emulsion

Aspect : White Liquid

Solid content : $20.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 6.0 – 7.5

Film property : Transparent, very soft & elastic film

Solubility : Water Soluble

Salient feature

- Very soft transparent elastic & flexible film
- Non tacky
- Quick drying in nature hence producing non tacky in film
- Very good adhesion and particularly suitable for base coat formulation

- **H BIND 709** can be used for base coat formulation along with **H BIND 115**.
- Improves the natural look of leather and gloss in addition to desired up-gradation
- H BIND 709 can be suitable for sheep nappa, suede Nappalan and other types of garment finishes



Soft Impregnation Binder

Specification

Composition : Acrylic Emulsion

Aspect : Translucent Binder

Solid content : $20.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 6.0 – 7.5

Film property : Transparent, Non-film forming in nature

Solubility : Water Soluble

Salient feature

• Soft Impregnating property

• Can be used for corrected grain and /or Full Grain impregnation

Mode of application

 H BIND GC 1 can be used alone or in combination with other medium soft impregnation binders for improving the tightness of corrected grain or smooth finished Leather



Penetrator

Specification

Composition : Water Borne Solvents

Aspect : Colourless liquid

Active content : $37.0 \pm 1.0 \%$

pH of 10 % emulsion : 5.5 – 7.0

Solubility : Water Soluble

Salient feature

• Reduces surface tension so helps to improve adhesion of finish with the substrate

• Helps to improve penetration of Impregnation Binder & Base coat finishing system

Mode of application

• H SOLVE 391 can be used :

For base coat formulation : 20 - 50 gms / litre
 For Impregnation : 50-100 gms / litre





Penetrator

Specification

Composition: Surfactants and Water Miscible Solvents

Aspect : Colorless liquid

Solid Content: 25±1 %

pH of 10% Emulsion : 5.5 - 7.0

Charge : Anionic

Solubility: Water Soluble

Salient features

• H Driver E is a mixture of anionic surfactants and water-miscible solvents

- H Driver E is a low viscous, clear liquid, which is in every ratio miscible with water.
- H Driver E is used as penetrator in impregnations and spray dyeings.
- H Driver E can also be used in base coats to improve their penetration, adhesion and levelling properties (approx. 50 – 100 gm / kg mix).
- H Driver can be used for curtain coating, padding, spraying as well as for roller coater applications.

Examples of Application

1. Spray Dyeing

100 - 200 parts H Driver E

850 - 700 parts Water

50 - 100 parts Dye Solution

Spray 2X – 3X as per the shade requirement

2. Impregnation - Shoe upper, corrected grain, harder type / Belting Leathers

100 - 150 parts H Driver E

600 - 500 parts Water

300 - 350 parts H Binder GC1

Apply by RRC / Curtain Coater, 30 gm / Sq Ft, Rest overnight, Vac Dry at 70° C / 2 min, Air off for 4 hours

3. Impregnation - Shoe upper, corrected grain, Medium Soft type

50 - 75 parts H Driver E 750 - 675

200 - 250 parts H Binder GC1

parts Water

Apply by RRC / Curtain Coater, 30 gm / Sq Ft, Rest overnight, Vac Dry at 70^{\prime}C / 2 min, Air off for 4 hours



H Driver U

Penetrator

Specification

Composition : Surfactants and Water Miscible Solvents

Aspect : Colorless liquid

Solid Content : $37\pm1\%$

pH of 10% Emulsion : 5.5 – 7.0

Charge : Anionic

Solubility: Water Soluble

Salient features

• H Driver U is a mixture of anionic surfactants and water-miscible solvents

- H Driver U is a low viscous, clear liquid, which is in every ratio miscible with water.
- H Driver U is used as penetrator in impregnations and spray dyeings.
- H Driver U can also be used in base coats to improve their penetration, adhesion and levelling properties (approx. 50 – 100 gm / kg mix).
- H Driver can be used for curtain coating, padding, spraying as well as for roller coater applications.

Examples of Application

4. Spray Dyeing

100 - 200 parts H Driver U

850 - 700 parts Water

50 - 100 parts Dye Solution

Spray 2X – 3X as per the shade requirement

5. Impregnation - Shoe upper, corrected grain, harder type / Belting Leathers

100 - 150 parts H Driver U

600 - 500 parts Water

300 - 350 parts H Binder GC1

Apply by RRC / Curtain Coater, 30 gm / Sq Ft, Rest overnight, Vac Dry at 70°C / 2 min, Air off for 4 hours

6. Impregnation - Shoe upper, corrected grain, Medium Soft type

50 - 75 parts H Driver U

750 - 675 parts Water

200 - 250 parts H Binder GC1

Apply by RRC / Curtain Coater, 30 gm / Sq Ft, Rest overnight, Vac Dry at 70°C / 2 min, Air off for 4 hours





Soft Anionic Compact Binder

Specification

Composition : Mixture of Acrylic Emulsion and Additives

Aspect : Off White Milky Liquid

Solid content : $22.0 \pm 1.0 \%$

pH of 10 % emulsion : 8.0- 9.0

Charge : Anionic

Solubility : Water Soluble

Salient feature

• Soft film with medium gloss

• Excellent elongation and flexibility

- Excellent covering and selection up gradation
- Natural wet waxy feel
- Very good embossing property and print retention
- Excellent mechanical resistance

- H COMP 504 is specially developed for application on base coat formulation for all types of leather finishes
- **H COMP 504** can be mixed both water and other auxiliaries





Medium soft Anionic Compact Binder

Specification

Composition: Mixture of Acrylic Emulsion and Additives

Aspect : White Milky Liquid

Solid content : $23.0 \pm 1.0 \%$

pH of 10 % emulsion : 8.0 - 9.0

Charge : Anionic

Solubility : Water Soluble

Salient feature

 Blend of acrylic and special additives having excellent covering and selection up gradation properties

- Medium soft film with medium gloss
- Non tacky
- Excellent elasticity and flex
- Very good embossing property and print retention
- High wet rub and dry rub fastness
- Excellent mechanical resistance

Mode of application

- **H COMP 5588** is specially developed for application on base coat formulation for corrected grain and shoe upper & Upholstery.
- **H COMP 5588** can be mixed both water and other auxiliaries.

Use level of **H COMP 5588** is 100 – 150 parts per litre





Medium soft poly Acrylic Compact Binder

Specification

Composition: Mixture of Acrylic Emulsion and Additives

Aspect : White Milky Liquid

Solid content : $22.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 8.0- 9.0

Solubility : Water Soluble

Salient feature

 Blend of acrylic and special additives having excellent covering and selection up gradation properties

- Medium soft film with matt look
- Non tacky
- Excellent elasticity and flex
- Very good embossing property and print retention
- High wet rub and dry rub fastness
- Excellent mechanical resistance

Mode of application

- **H COMP 6688** is specially developed for application on base coat formulation for corrected grain and shoe upper & Upholstery.
- **H COMP 6688** can be mixed both water and other auxiliaries.

Use level of **H COMP 6688** is 100 – 150 parts per litre





Soft One Touch Compound

Specification

Composition : Specialty Binders and waxes

Aspect : Creamish Opaque thick Emulsion

Solid content : $42.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 8.0- 9.0

Solubility : Water Soluble

Salient feature

- Specialty One touch compound designed to produce highly covered Leather with Drum Dyed look.
- Very Fine particle size that avoid loading on the grain, so maintain natural look.
- Specially designed to apply multiple coat on the leather without any loading.
- Can be used alone or with other binding & upgrading components to get good covering and embossing.
- Excellent elasticity and flex

Mode of application

- **H COMP 7744** is specially developed for one touch application in garment and bag leather finishing with DD / NDDM look.
- **H COMP 7744** can be mixed both water and other auxiliaries.

Use level of **H COMP 7744** is 200-300 parts per litre



Compact based on Casein and Additives

Specification

Composition : Mixture of Casein and Additives

Aspect : Off White Milky Liquid

Solid content : $15.0 \pm 1.0 \%$

pH of 10 % emulsion : 2.0 - 4.0

Charge : Cationic

Solubility : Water Soluble

Salient feature

- Soft film with medium gloss
- Non tacky and polishable
- Excellent elasticity and flex
- Excellent covering and selection up gradation without loading
- Natural wet waxy feel
- Very good embossing property and print retention
- Excellent mechanical resistance

Mode of application

- H COMP K 333 is designed for necessary upgradation, with polishing tendency for base and intermediate coat application for garment types of Nappa and Natural milled leather maintaining natural look.
- **H COMP K 333** Can be mixed both water and other auxiliaries.

The quantity of **H COMP K 333** is depending upon the pigment ratio of the solution





Compact Acrylic binder

Specification

Composition : Poly acrylate compact

Aspect: Creamish Liquid

Solid Content : $34 \pm 1.0\%$

pH of 10% Emulsion : 7.5 – 8.5

Charge : Anionic

Particle Size : Fine

Film Properties : Medium Soft

Salient features

- Fine particle sized acrylic compact having good filling & upgrading properties
- It forms uniform semi-transparent, medium soft, elastic, non-sticky film of low thermo plasticity
- It can perfectly be used in combinations for all types of base coats

Applications

- It can be used in combinations with soft, medium soft binders in the pre-base & base coat formulations
- It is ideal for finishing milled articles, both NDM and PDM, because of its extensive millability withstanding character without finishing film breaking
- It is especially suited for finishing splits also grain leather, both buffed and full grain
- It can be applied by padding, spraying or roller coating
- It can be used along with harder polymers to get good extensibility and flexibility

Examples of Application

1. Base Coat for Pigmented Finish, Haircell Softy

250	parts	H Bind CP 16
50	parts	H Bind 115
50	parts	H Pro 351
50	parts	H Wax 5580
550	parts	Water
100	parts	HH Microtinta Pigment

Spray 2X, Roto FHC / Plain Plate, Spray 2X and fix with Top Coat, Plain Plate at 90° C / 50P

2. Base Coat for Natural Dry Milled / Printed Dry Milled article

150	parts	H Bind CP 16
50	parts	H Bind 115
50	parts	H Bind 119
50	parts	H Pro 351
50	parts	H Wax 5580
100	parts	Water
100	parts	HH Microtinta Pigment

For NDM: Apply 2X Pad Coat, Fix with1:2 H Top GL 07, Dry mill for 8 hours and finish

For PDM: Apply 2X Pad Coat, Fix with1:2 H Top GL 07, Emboss, Dry mill for 8 hours and finish



Medium soft modified Polyamide Based Protein binder

Specification

Aspect : Slightly Yellowish Liquid

Solid content : $14.0 \pm 1.0 \%$

pH of 10 % emulsion : 9.0 - 10.0

Charge : Anionic

Film property : Medium Hard, Clear and Glossy Film

Solubility : Water Soluble

Salient feature

Very high gloss and crystal look

- Thin glossy film
- Excellent action on Polishing and Glazing
- Smooth and silky touch
- Excellent heat resistance
- Improve the dry rub properties and withstand high temperatures during plating

Mode of application

• Recommended use of **H PRO 313** may vary from 50 – 150 parts per litre



Medium Soft General purpose Casein Binder

Specification

Aspect : Slightly Yellowish Liquid

Solid content : $10.0 \pm 0.5 \%$

pH of 10 % emulsion : 7.0 - 9.5

Charge : Anionic

Film property : Medium Soft, and Medium Glossy

Solubility : Water Soluble

Salient feature

Smooth and silky touch

- Mainly used for base season coat to avoid the tackiness
- Excellent heat resistance
- Medium gloss in nature

Mode of application

• **H PRO351** Improve the dry rub properties and withstand plating temperatures

Recommended use of **H PRO 351** may vary from 50 – 100 parts per litre





Cationic Medium Soft Modified Protein Binder

Specification

Aspect : Reddish Viscous Liquid

Solid content : $7.0 \pm 1.0 \%$

pH of 10 % emulsion : 2.0 - 4.0

Charge : Cationic

Film property : Medium Soft &Waxy Film

Solubility : Water Soluble

Salient feature

- Medium gloss and excellent re-polishing
- Excellent action on polishing and glazing
- Smooth and silky touch
- Excellent heat resistance
- It gives excellent adhesion on cationic finishing

Mode of application

Recommended use of quantity of **H PRO K 317** may vary from 50 – 150 parts per litre



Soft Aliphatic Aqueous Polyurethane Micro Binder

Specification

Composition : Aliphatic PU

Aspect : Clear translucent Liquid

Solid content : $14.0 \pm 1.0 \%$

pH of 10 % emulsion : 7.5 – 9.0

Charge : Anionic

Film property : Transparent, Soft and Micro Fine

Solubility : Water Soluble

Salient feature

- Micro Soft film with excellent elongation
- Excellent adhesion promoter
- Maintains natural look in aniline and semi-aniline finishes
- Easy release on heated plating or embossing
- Control the dye bleeding on suede leather

Mode of application

- **H PU 239** can be used for All base coat / pre-base adhesion coat application
- **H PU 239** can be used in Burnish / Oil Pull up / Crazy Horse finishing as adhesion promoter for subsequent Intermediate / Top coat

Recommended quantity of **H PU 239** may vary from 50 – 300 parts per litre





Soft Aliphatic Polyurethane Binder

Specification

Composition : Aliphatic PU

Aspect : Clear Translucent Liquid

Solid Content : $21 \pm 1.0\%$

pH of 10% Emulsion : 7.0 – 9.0

Charge : Anionic

Particle Size : Fine

Film Properties : Medium Soft, Clear, Transparent and Glossy

Salient features

- Fine particle sized PU dispersion of low viscosity
- It forms clear, transparent, medium soft, glossy, elastic, non-sticky film of low thermo plasticity
- It can perfectly be used in combinations for polishable & glazable base coats
- It improves fastness properties and scuff resistance
- It maintains natural look in aniline & semi-aniline finishes

Applications

- It can be used in combinations with soft, medium soft binders in the pre-base & base coat formulations
- It can be used in combinations with polishable grounds, waxes, fillers, protein binders in the Polishable Pre-base coats to get uniform absorption, closed grain and better sealing of full grain and corrected grain leathers

Examples of Application

1. Polish Coat

100	parts	H PU 238-PG
150	parts	H Pro 351
50	parts	H Wax 5580
450	parts	Water
25	parts	HH Microtinta Pigment

Spray 2X, Light & Uniform, Rest for 6 hours, Dry Well, Felt Polish

2. Base Coat for Full Grain Semi Aniline, Haircell Softy and Nappa Garment

100	parts	H PU 238
100	parts	H Pro 351
50	parts	H Wax 5580
40	parts	H Fill 410
75	parts	H Bind 115
50	parts	H Bind 119
450	parts	Water
60	parts	HH Microtinta Pigment

Spray 2X, Sandblast / Plain Plate / FHC at 80' C / 120 bar



H Top PU 919

Polyurethane Dispersion for high gloss and natural look

Specification

Composition : Aqueous Aliphatic Polyurethane Dispersion

Aspect : Opalescent Liquid

Solid Content : $22 \pm 0.5\%$

pH of 10% Emulsion : 7.0 ± 0.5

Particle Size : Fine

Film Properties : Medium Soft, Glossy

Salient features

- Fine particle sized PU dispersion of medium viscosity
- It forms clear, medium soft, medium glossy film
- It withstands high temperature in operations such as plating and contilux
- It produces excellent rub fastness properties and UV resistance
- It maintains natural touch of the leather and gives pleasant handle
- It can be cross-linked with suitable cross linkers

Applications

- H PU Top 919 can be used for achieving medium to high gloss.
- Due to its composition, it is compatible with dye solutions, protein binders and waxes
- It can be applied diluted or undiluted by spray or roller coater applications
- High physicals can be achieved with the usage of cross linker with H Top PU 919
- It is suitable for all types of milled articles

Examples of Application

1. High Gloss Top Coat / Imitation Glaze

parts H Top PU 919

parts H Pro 351

parts H Pro 351

parts Egg Albumin

Water

parts Dye Solution

cross Linker

Spray 2X, Plain Plate at 100'C / 100 bar

2. Top Coat for Milled & Bag Leather

parts G Top PU 919

parts G Top PU 919

parts G Top DL 09

parts Water

parts G Touch K 590

parts Cross Linker

Spray 2X, Plain Plate at 100^{\prime} C / 120 bar and Dry Mill for 2-3 hours, Kissplate at 110^{\prime} C



Soft Aliphatic Cationic Polyurethane

Specification

Composition : Aliphatic PU

Aspect : Bluish Transparent Liquid

Solid content : $20.0 \pm 1.0 \%$

pH of 10 % emulsion : 4.0 – 5.5

Charge : Cationic

Film property : Transparent, Soft and High Glossy

Solubility : Water Soluble

Salient feature

- Very soft and high elongation film property
- Maintains natural look in aniline and semi- aniline finishes
- Gives very good adhesion
- Non tacky in film
- Excellent polishing and smooth grain surface
- Very pleasant and silky feel

Mode of application

Recommended quantity of **H PU K 343** may vary from 50 – 150 parts per litre



Soft Aliphatic Cationic Polyurethane

Specification

Composition : Aliphatic PU

Aspect : Bluish Transparent Liquid

Solid content : $15.0 \pm 1.0 \%$

pH of 10 % emulsion : 3.0 - 4.0

Charge : Cationic

Film property : Transparent, Soft and High Glossy

Solubility : Water Soluble

Salient feature

- Very soft and high elongation film property
- Maintains natural look in aniline and semi- aniline finishes
- Gives very good adhesion
- Non tacky in film
- Excellent polishing and smooth grain surface
- Very pleasant and silky feel

Mode of application

Recommended quantity of **H PU K 345** may vary from 50 – 150 parts per litre



Soft cationic Compact Binder

Specification

Composition : Mixture of poly urethane with Additives

Aspect : Off White Milky Liquid

Solid content : $15.0 \pm 1.0 \%$

pH of 10 % emulsion : 2.0 - 4.0

Charge : Cationic

Solubility : Water Soluble

Salient feature

Soft film with medium gloss

- Non tacky and polishable
- Excellent elasticity and flex
- Excellent covering and selection up gradation without loading
- Natural wet waxy feel
- Very good embossing property and print retention
- Excellent mechanical resistance

Mode of application

- **H BIND K 306** is specially developed for application on base coat formulation for garment types of Nappa and Natural milled leather
- Can be mixed both water and other auxiliaries.

The quantity of **H BIND K 306** is depending upon the pigment ratio of the solution



Cationic Filler Based on synthetic emulsion with special additives

Specification

Composition : Synthetic fillers with Additives

pH of 10 % emulsion : 3.5 – 4.5

Charge : Cationic

Film property : Medium Soft & Waxy Film

Solubility : Water Soluble

Salient feature

Smooth silky touch

- Excellent masking power
- · Reduce the stickiness on embossing
- Upgrades the selection of leather, excellent covering and uniform filling
- No whiteness after finishing
- Natural look and polishable
- Softness and without loading of the finish

Mode of application

Recommended use of **H FIL K 331** may vary from 50 – 100 parts per litre



Cationic Synthetic Wax Emulsion

Specification

Composition : Synthetic Wax

Aspect : Off White Viscous Liquid

Solid content : $14.0 \pm 1.0 \%$

pH of 10 % emulsion : 3.5 -5.5

Charge : Cationic

Solubility : Water Soluble

Salient feature

Smooth wet touch

- Excellent fullness, softness and touch
- Excellent plate release
- Natural look
- It can also be used as a top coat along with feel modifiers

Mode of application

• **H WAX K 445** is widely admired in cationic base coat formulation

Recommended use of **H WAX K 445** may vary from 50 – 100 parts per litre



Anionic Inorganic filler

Specification

Composition : Inorganic compounds

Aspect : Off white viscous liquid

Active content : $23.0 \pm 1.0 \%$

pH of 10 % emulsion : 7.0 - 8.5

Charge : Anionic

Solubility : Water Soluble

Salient feature

- Smooth waxy touch
- · Reduce the tackiness while embossing
- Upgrades selection of leather, excellent covering and uniform filling
- Not giving whiteness after finishing
- Natural dull look
- Improve the selection of Leather

Mode of application

 H FIL 410 is widely admired in Shoe leather segment and Upholstery for its contribution for excellent up-gradation, softness, touch and without loading to the finish

Recommended use of **H FIL 410** may vary from 50 – 100 parts per litre



Natural General Purpose Wax Emulsion

Specification

Composition : Natural Wax

Aspect : Cream Viscous Liquid

Solid content : $14.0 \pm 1.0 \%$

pH of 10 % emulsion : 8.0 - 9.5

Charge : Anionic

Solubility : Water Soluble

Salient feature

- Smooth waxy touch
- Excellent plate release
- · Reduce the tackiness while embossing
- Will not give whiteness after finishing
- Natural look & no loading to grain

Mode of application

• **H WAX 606** is widely admired in base coat formulation

Recommended use of **H WAX 606** may vary from 50 – 80 parts per litre



Anionic Synthetic Wax Emulsion for Basecoat Season

Specification

Composition : Synthetic Wax

Aspect : White Viscous Liquid

Solid content : $15.0 \pm 1.0 \%$

pH of 10 % emulsion : 8.0 - 9.5

Charge : Anionic

Solubility : Water Soluble

Salient feature

- Smooth waxy touch
- Excellent plate release
- · Reduce the tackiness while embossing
- Will not give whiteness after finishing
- Natural look
- Gives excellent fullness, softness, touch and without loading the finish

Mode of application

• **H WAX 5580** is widely admired in base coat formulation

Recommended use of **H WAX 5580** may vary from 50 – 80 parts per litre



Cationic Synthetic Wax Emulsion

Specification

Composition : Synthetic Wax

Aspect : Off White Viscous Liquid

Solid content : $14.0 \pm 1.0 \%$

pH of 10 % emulsion : 3.5 –5.5

Charge : Cationic

Solubility : Water Soluble

Salient features

• Soft, High Filling Cationic Wax Emulsion

Suitable for filling grain closing and sealing

• It can perfectly be used in combinations for all types of cationic pre-grounds

• Excellent plate release

Applications

 Because of its versatility, it can be used in polish grounds, plated and polished finishes of natural look

• It can be used as a feel modifier for Garment Leathers and Nappa Leathers

Examples of Application

1. Polish Ground for Natural Look Finish

Spray 2X, Felt Polish, Plain Plate at 90'C / 50 P

100	parts	H Wax K 419
100	parts	H Pro K 317
50	parts	H Bind K 306
50	parts	H Bind K 333
50	parts	H PU K 345
550	parts	Water
30	parts	HH Microtinta Pigment





Modified Natural waxes

Specification

Composition : Modified natural waxes in emulsion

Aspect : Milky White liquid

pH of 10 % emulsion :6.0 - 7.0

Solubility : Water Soluble

Salient feature

• Fine milky white emulsion

- Imparts natural feel to leathers
- Silky touch and sheen
- Can be used for top spry for nubuck and suede
- Maintains the feel and touch for long time

Mode of application

H OIL GGS is specially designed for nubuck and suede for natural touch and sheenl

Examples of Application

1. Top Coat:

parts H OIL GGS

470 parts Water

Spray 2X, Plain Plate at 90'C / 50 P



Synthetic solvent soluble pull up oil

Specification

Composition : Synthetic oil

Aspect : Slightly Yellowish Liquid

Solid content : 100 %

Solubility : Solvent Soluble

Salient feature

• Gives very strong Pull up effect

• Can be applied through heat roller coat machine along with the heat melting WAX

• Excellent darkening

• Very good heat resistance on plating & Satilux

- Very good adhesion for Pull up and Crunch finish formulation
- Excellent re-polishing
- Excellent natural feel and touch

Mode of application

• H OIL 367 can be used as undiluted to get very stronH PUll up effects



Natural & Synthetic water soluble pull up oil

Specification

Composition : Natural and synthetic oil

Aspect : Yellow Brown Liquid

Solid content : $92.0 \pm 1.0 \%$

Solubility : Water miscible

Salient feature

• Gives very strong PUII up effect

• Excellent Darkening

Very good heat resistance on plating & Satilux

- Very good Adhesion for Pull up and Crunch finish formulation
- Excellent re-polishing
- Impart excellent natural feel and touch

Mode of application

- H OIL 369 can be used without diluting for very strong Pull up effect
- To get normal pull up effect, it can be diluted with water at the ratio of 1:1



Oil for Nubuck leathers

Specification

Composition : Synthetic oil and Natural fats

Aspect : Dark brown viscous oil

Solid content : $90.0 \pm 1.0 \%$

Solubility : Solvent soluble

Salient feature

• Feel modifier for nubuck leathers

- Imparts waxy and fatty touch
- Can be used undiluted
- Suitable for reverse roller coater or by spray
- Excellent re-polishing
- Excellent natural feel and touch

Mode of application

• **H OIL 390** can be used as undiluted to get very strong darkening effect



Mixture of Synthetic pull up oil

Specification

Composition : Synthetic oil

Aspect : Yellow Brown viscous oil

Solid content : $98.0 \pm 1.0 \%$

Solubility : Solvent soluble

Salient feature

• Gives excellent pull up effect

• Excellent action against polishing and glazing

• Very good heat resistance while plating & satilux

• Excellent re-polishing

• Excellent natural feel and touch

Mode of application

• **H OIL 460** can be used as undiluted to get very strong darkening effect





Combination of Hard Synthetic and Carnauba Waxes for crunch effect

Specification

Composition : Synthetic and Carnauba Waxes

Aspect : Off white emulsion

Solid content : $16.0 \pm 1.0 \%$

Charge : Anionic

Solubility : Water Soluble

Salient feature

• Gives excellent darkening effect

- Can be used for crunch and pull up finishes
- Excellent action against polishing
- Very good heat resistance while Plating & Satilux
- Very good adhesion
- Excellent re polishing
- Non Tacky in nature
- Excellent natural feel and touch.

Mode of application

- **H WAX CW** can be used without diluting for very strong darkening effect
- **H WAX CW** can also be used along with **H OIL 369** to get softness and darkening





Blend of Natural& Synthetic hard waxes to impart Burnish effect

Specification

Composition : Combination of Natural & Synthetic Waxes

Aspect : Off white emulsion

Solid content : $15.0 \pm 1.0 \%$

Charge : Anionic

Solubility : Water Soluble

Salient feature

• Gives excellent Burnish Effect

- Darkening property can be modified by dosage or by combining with other auxiliaries
- Can also be used for crunch and pull up finishes with other Crunch waxes
- Excellent action against polishing
- Very good heat resistance while Plating & Sati lux
- Very good adhesion to the substrate
- Re-polishable in nature
- Excellent natural feel and touch.

Mode of application

- H WAX BW can be used with or without dilution to adjust burning and / or darkening effect
- **H WAX BW** can also be used along with H OIL 369 to get softness and darkening



White Wax with PU Blended

Specification

Composition : PU Blended white Waxes

Aspect : White colour

Solid Content : $25.0\pm1.0\%$

Charge : Anionic

Solubility : Water Soluble

Salient feature

• Gives excellent darkening effect

- Mainly recommended for white effect, crunch and pull up finishes
- Excellent action against polishing
- Very good heat resistance while Plating & Satilux
- Very good adhesion
- Excellent re polishing
- Non Tacky in nature
- Excellent natural feel and touch.

Mode of application

• **H WAX SW** can be used without diluting for very strong darkening effect



H WAX DMW

Solvent-free, hot melting pull-up wax

Specification

Composition : Blend of synthetic hard Waxes

Aspect : White solid **Solid content** : $99 \pm 1.0 \%$

Solubility : Insoluble in water. Miscible with oils

Melting point : 60° C

Salient feature

• Blend of hard synthetic waxes, free from solvents

- Imparts very strong pull up effect with very dark and dry surface feel on corrected and full grain leathers
- On plating above 70°C the darkening effect will be enhanced
- Can be suitable for not only conventional pull-up finishes, in combination with
 H OIL 460 on water resistant crust types for the production of different water
 resistant pull-up articles
- G Wax DMW does not adversely affect Maeser and Bally flexes or water absorption values of many water resistant crusts, particularly of those which have been retanned/fat liquored with systems for water resistant pull-ups.
- Compatible with other oils and waxes at above 60°C in molten condition

Mode of application

Recommended use of H **WAX DMW** may vary from 100 – 500 parts depending on the pull up effect



H WAX SMW

Solvent-free, hot melting wax for pull-up / crazy horse leathers

Specification

Composition : Synthetic Waxes **Aspect** : Pale yellow solid

Solid content : $99 \pm 1.0 \%$

Solubility : Insoluble in water. Miscible with oils

Melting point : 60°C

Salient feature

Blend of medium hard synthetic waxes with stuffing compounds

• Imparts dark and rich surface feel with pull-up effect on corrected and full grain leathers

- On plating above 70°C the leather will darken considerably
- Can be suitable for not only conventional pull-up finishes, on water resistant crust types for the production of different water resistant pull-up articles
- G Wax DMW does not adversely affect Maeser and Bally flexes or water absorption values of many water resistant crusts, particularly of those which have been retanned/fat liquored with systems for water resistant pull-ups.
- Also makes the leather firm and tighten the grain break on soft and loose grained leathers

Mode of application

Recommended use of $\bf H$ $\bf WAX$ $\bf SMW$ may vary from 100 – 500 parts depending on the pull up effect



Solvent soluble Nitro Cellulose Lacquer

Specification

Composition : Nitrocellulose Lacquer

Aspect : Clear Liquid

Solid content : $40.0 \pm 1.0 \%$

Film property : Medium Soft, and High Gloss in Nature

Solubility : Solvent Soluble

Salient feature

- Very high gloss
- Excellent scuff resistance
- Excellent cold crack resistance
- Excellent withstand for high temperature
- Excellent dry & wet rub fastness
- Excellent light fastness property
- Excellent emboss retention

Mode of application

Recommended use of **H LAC 04** may vary from 400 – 500 parts per litre





High Gloss water / solvent both phase soluble Universal Lacquer

Specification

Composition : Clear Nitrocellulose

Aspect : Pale Yellowish high viscous liquid

Solid content : $25.0 \pm 1.0 \%$

Film property : Medium Soft, high glossy film

Solubility : Water / Solvent Soluble

Salient feature

· Very high gloss

- Excellent abrasion resistance
- Excellent cold crack resistance
- · Excellent withstand for high temperature
- Excellent dry & wet rub fastness
- Excellent light fastness property
- Excellent action against tape test

Mode of application

Recommended use of **H LAC 055** may vary from 200 – 500 parts per litre



Nitro Cellulose High Gloss Solvent soluble Lacquer

Specification

Composition : Clear Nitrocellulose

Aspect : Pale Yellowish Viscous Liquid

Solid content : $35.0 \pm 1.0 \%$

Film property : Soft and High gloss

Solubility : Solvent Soluble

Salient feature

- Very soft film with high gloss
- Excellent cold crack resistance
- Excellent light fastness property
- Excellent withstand for high temperature
- Maintains natural touch, pleasant handle of the leather
- Excellent dry & wet rub fastness
- Can also be used for dry milled articles
- Excellent emboss retention

Mode of application

Recommended use of **H LAC 06** may vary from 300 – 500 parts per litre



Medium Gloss Water soluble Nitrocellulose Lacquer Emulsion

Specification

Composition : Nitrocellulose Emulsion

Aspect : Milky White

Solid content : $15.0 \pm 1.0 \%$

pH of 10 % emulsion : 4.0 - 7.0

Film property : Soft, Transparent and Medium Gloss

Solubility : Water Soluble

Salient feature

- Very soft film property
- Excellent light fastness property
- Excellent withstand for high temperature
- Maintains natural touch, pleasant handle of the leather
- Excellent dry & wet rub fastness
- Can also be used for dry milled articles
- Very good flexibility
- Excellent emboss retention

Mode of application

• **H LAC 07** can be used for all types of aniline and semi aniline finishes Recommended use of **H LAC 07** may vary from 300 – 500 parts per litre





Matt Nitro Cellulose Lacquer Emulsion

Specification

Composition : Nitrocellulose emulsion

Aspect : Milky White

Solid content : $15.0 \pm 1.0 \%$

pH of 10 % emulsion : 4.0 – 7.0

Film property : Soft, and Matt

Solubility : Water Soluble

Salient feature

- Very soft film
- Not giving whiteness after milling
- Natural and waxy touch
- Not giving raying effect in dark colours
- Excellent dry & wet rub fastness
- Very good flexibility
- Excellent emboss retention

Mode of application

Recommended use of **H LAC MATT 09** may vary from 400 – 500 parts per litre





Solvent soluble Matt Nitro Cellulose Lacquer

Specification

Composition : Nitrocellulose Lacquer

Aspect : Hazy Liquid

Solid content : $12.0 \pm 1.0 \%$

Film property : Medium Soft, and Matt

Solubility : Solvent Soluble

Salient feature

- Silky Touch
- Medium soft film with matt look
- Not giving raying effect in dark colours
- Excellent dry & wet rub fastness
- Excellent emboss retention
- Very good flexibility

Mode of application

Recommended use of **H LAC MATT 10** may vary from 400 – 500 parts per litre



Medium Soft Aliphatic Polyurethane Top

Specification

Composition : Aliphatic PU

Aspect : Transparent liquid

Solid content : $29.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 7.5 - 8.5

Film property : Transparent, Medium Soft & high glossy

Solubility : Water Soluble

Salient feature

- Strong adhesion
- Very high gloss like casein
- Excellent withstand for high temperature
- Maintains natural touch, pleasant handle of the leather
- Excellent dry & wet rub fastness
- Very good flexibility and elongation
- Excellent emboss retention and tape test

Mode of application

- **H PU 918** is widely admired in shoe and leather goods segment for its contribution for softness, touch and adhesion to the finish
- **H PU 918** Improve the natural look of leather

Recommended use of **H PU 918** may vary from 50 – 300 parts per litre





Matt Aliphatic Polyurethane Top

Specification

Composition : Aliphatic PU

Aspect : White Emulsion

Solid content : $26.0 \pm 1.0 \%$

Charge : Anionic

pH of 10 % emulsion : 7.5 - 8.5

Film property : Opaque, Medium Soft & Matt look

Solubility : Water Soluble

Salient feature

- Strong adhesion
- Imparts Matt Finish
- While plating on high temperature it imparts a fine sheen
- Maintains natural touch, pleasant handle of the leather
- Excellent dry & wet rub fastness
- Very good flexibility and elongation
- Excellent emboss retention and tape test

Mode of application

- **H PU MT 240** can be used alone or in combination with other PU Top coats to adjust the gloss.
- **H PU MT 240** Can be used with other coalescing water borne solvents for better performance

Recommended use of **H PU MT 240** may vary from 50 – 300 parts per litre



H LAC 012

High Gloss Clear Nitrocellulose Lacquer

Specification

Composition : Clear Nitrocellulose

Aspect : Pale Yellowish high viscous liquid

Solid content : $35.0 \pm 1.0 \%$

Film property : Medium Soft, high glossy film

Solubility : Solvent Soluble

Salient feature

Very high gloss

• Excellent abrasion resistance

• Excellent cold crack resistance

- Excellent withstand for high temperature
- Excellent dry & wet rub fastness
- Excellent light fastness property
- Excellent action against tape test

Mode of application

Recommended use of **H LAC 012** may vary from 100 – 500 parts per litre



Non Ionic Modified Silicon Emulsion

Specification

Composition : Modified Silicon

Aspect : Milky White liquid

Solid content : $14.0 \pm 1.0 \%$

Charge : Cationic

pH of 10 % emulsion : 3.0 - 5.5

Solubility : Water Soluble

Salient feature

- Water soluble silicon emulsion
- Soft and very high slippery feel
- Natural silky touch
- Natural look and will not affects the shine level of the leather
- Can also be used along with lacquer emulsion
- Excellent Scuff resistance and withstanding tape test

Mode of application

- H TOUCH 509 is specially designed for Sheep Nappa and other all type of Garment finishes
- H TOUCH 509 Can also be used along with H WAX 5580 & H TOUCH GWS to get excellent touch and natural feel

Recommended use of **H TOUCH 509** may vary from 20 - 50 parts per litre





Very Effective Modified Silicon Emulsion

Specification

Composition : Modified Silicon

Aspect : Milky White liquid

Solid content : $55.0 \pm 1.0 \%$

pH of 10 % emulsion : 6.0 - 7.5

Solubility : Water Soluble

Salient feature

• Water soluble silicon emulsion

- Excellent smooth, soft and natural feel
- Natural warm touch
- Natural look and does not affect the shine level of the leather
- Can also be used along with lacquer emulsion as top coat to modify the feel

Mode of application

- **H TOUCH GWS** is specially designed for sheep nappa and other type of garment finishes
- H TOUCH GWS Can also be used along with H WAX 5580 to get excellent touch and natural feel

Recommended use of **H TOUCH GWS** may vary from 20 - 50 parts per litre





Very Effective Solvent Soluble Silicon

Specification

Composition : Modified Silicon oils

Aspect : Transparent liquid

Solubility : Solvent Soluble

Salient feature

Solvent soluble silicon

- Excellent smooth, soft and natural feel
- Natural warm touch
- Natural look and does not affect the shine level of the leather
- Can also be used along with lacquer emulsion as top coat to modify the feel

Mode of application

H TOUCHLON S is specially designed for solvent based finishes.

Recommended use of **H TOUCHLON S** may vary from 20 - 50 parts per liter





Silicone emulsion

Specification

Composition : Cationic Silicone Emulsion

Aspect : Translucent liquid

Solid Content : 11 ± 1

pH of 10% Emulsion : 4.0 ± 1.0

Charge : Cationic

Salient features

Cationic Water Emulsion Silicone for a stable, slippery feel

• Compatible with all cationic products and selected anionic products

Applications

- It can be used as feel modifier in any water based top coats; it gives a smooth, silky touch and improves tape and rub fastness.
- Due to its self-cross-linking characteristics it does not effect the lacquer emulsions fixing properties.
- Its charge allows its use in any cationic base coat in order to reduce the resin stickiness and improve the covering and the feel.

Examples of Application

1. Top Coat:

500 parts H LAC 07 470 parts Water

30 parts H Bind K 306

Spray 2X, Plain Plate at 90'C / 50 P





Modified Silicon Emulsion

Specification

Composition : Modified Silicon

Aspect : Milky White liquid

pH of 10 % emulsion : 4.0 - 6.0

Solubility : Water Soluble

Salient feature

• Water soluble silicon emulsion

• Soft and very high slippery feel

Natural silky touch

• Natural look and will not affects the shine level of the leather

• Can also be used for top spry for Nubuck and suede

Mode of application

H TOUCH GNS is specially designed for Sheep Nappa and other types of all garment finishes. It can also be used along with H WAX 5580 & H TOUCH GWS to get excellent touch and natural feel.

Examples of Application

1. Top Coat:

parts H Touch GNS

470 parts Water

30 parts H Bind K 306

Spray 2X, Plain Plate at 90'C / 50 P



Water soluble fixing Agent

Specification

Composition : Organic Compound with Aldehyde Function

Aspect : Transparent liquid

Solubility : Water Soluble

Salient feature

• **H FIX** replaces formaldehyde in fixing of casein finishes

- Excellent cross link with casein
- Maintains natural touch, pleasant handle of the leather
- Excellent rubbing & wet resistance

Mode of application

Normally diluted in water by 1:2 or 1:3 depends on the finishes

H FIX can also be used along with lacquer emulsion to fix the finishes other than casein finishes



H FIX FF

Formaldehyde free fixing Agent

Specification

Composition : Organic Compound with Aldehyde Function

Aspect : Transparent liquid

Solubility : Water Soluble

Salient feature

• **H FIX FF** is free from formaldehyde

• **H FIX FF** replaces formaldehyde in fixing of casein finishes

• **H FIX FF** has excellent cross link with casein

• **H FIX FF** maintains natural touch, pleasant handle of the leather

• **H FIX FF** excellent rubbing & wet fast resistance

Mode of application

Normally diluted in water by 1:2 or 1:3 depends on the finishes

H FIX FF can also be used along with lacquer emulsion to fix the finishes other than casein finishes



Non-Anionic Pigments

H BLACK A / H WHITE 101/ H WHITE SPL / H BROWN 201 / H BROWN 202 H YELLOW 301 / H YELLOW 302 / H RED 401 / H RED 402 / H BLUE 501 H BLUE 502 / H GREEN 601

Anionic Pigments

H BLACK N / H WHITE 701

Dyestuffs

SAYA YELLOW MR

SAYA YELLOW BROWN 2RL

SAYA ORANGE RED RL

SAYA BROWN MFR

SAYA BROWN NGB

SAYA BROWN CGG

SAYA OLIVE BROWN G

SAYA BROWN GRL

SAYA HAVANA 2RL

SAYA BROWN RL

SAYA BROWN HBR

SAYA BROWN NT

SAYA BROWN SGR

SAYA BROWN DS

SAYA BRWON MBL

SAYA DARK BROWN R

SAYA MAROON V

SAYA BLUE MTR

SAYA BLACK A-G

SAYA BLACK A-R