

Wet Process PU Synthetic Leather

Description

A nonionic modified multi-polymer silicone auxiliary agent generally used in dry and wet PU processes or resins

Functions

- Reduces the surface tension of the PU slurry system
- Raises the wetting ability and anti-adhesive properties to the substrate
- Increases the surface smoothness
- Improves leveling property and luster
- Prevents the formation of Bernard cells

Technical Specifications

Appearance: Straw yellow or colorless transparent liquid

Density: 1.04 ±0.01g/m (25°C)

Structure: Nonionic

Composition: Non volatile matter ≥98%

Application Functions

Dry PU process

Prevents adhering and stripping and increases reuse ability of the release paper. Prevents electrostatic charges.

Wet slurry

Improves flowability, reduces bubbles during the production processes and eliminates pin and shrinkage holes.

Dosage / Use

0.025~0.4% of the total system

Packaging and storage

Standard packaging: 50kg plastic drum

Storage: Drum tightly sealed and away from direct light, between 0~35°C.

Use within 12 months.

Wet Process PU Synthetic Leather

Description

Surfactant

Functions

- Enhances even foaming, film formability, resilience, and air & water permeability
- Enhances DMF displacement by water capacity in the coagulation tank
- Increases PU resin's solidification speed
- Assists in maintaining even film thickness

Specifications

Appearance: Straw yellow or colorless transparent liquid

Density: 1.04 ±0.01g/m (25°C)

Structure: Anionic / Nonionic

Composition: Active content ≥70%

Dosage

0.5~2:100 of 30% solid content PU resin

Packaging and storage

Standard packaging: 125kg plastic drums

Storage: Drum tightly sealed and away from direct light, between 0~35°C

Use within 6 months.

During long term storage there may be settling of the contents, mix well before use.

Wet Process PU Synthetic Leather

Description

Active organic agent

Functions

- Excellent anti-foaming and leveling properties
- Adds stability by modifying PU synthetic leather surface tension during coating ensuring smoothness and prevention of problems as pinholes and concave spots on the synthetic leather surface

Specifications

Appearance: Straw yellow or colorless transparent liquid

Composition: Non volatile matter $\geq 98.5\%$

Dosage / Use

1. The general dosage is 0.02~0.5% of the total PU resin system
2. For wet PU process base with thickness ≥ 1 mm increase the amount accordingly
3. For dry process PU resin let sit still for 15 minutes before use
4. For wet PU process base it is recommended to use vacuum resin degassing equipment before use

NOTE: It is advised to make a small test before use to confirm effect and dosage

Packaging and storage

Standard packaging: 50 & 125 kg plastic drums

Storage: Drum tightly sealed between 0~35°C.

Use within 12 months

Wet Process PU Synthetic Leather

Description

Anti Viscidity additive

Functions

- Excellent anti viscosity and smoothing effects
- Prevents BASE surface adhesion to itself
- Increases wear & damage resistance
- Especially suitable for low modulus wet and dry resins and processes

Specifications

Appearance: Fawn brown liquid

Composition: Non volatile matter $\geq 99\%$

Dosage / Use

0.8~1.2% of the total system

Add to dry process PU slurry

Add to wet process PU slurry

Packaging and storage

Standard packaging: 50kg plastic drum

Storage: Drum tightly sealed and away from direct light, between 0~35°C.

Use within 12 months.

Wet Process PU Synthetic Leather

Description

High Efficiency Anti Viscidity & Leveling Copolymer modified polysiloxane

Functions

- Significantly reduces the surface tension of PU resins
- Prevents surface sag during coating
- Improves leveling of the PU resin before solidification
- Anti-viscosity is particularly noticeable with PU resin with a modulus $\leq 30\text{MD}$
- Increases the mobility of PU slurry, prevents curling of BASE and enhances the texture
- Reduces bubble formation during the wet PU process

Specifications

Appearance: Straw yellow liquid

Density: $1.04 \pm 0.01\text{g/m}$ (25°C)

Refraction Index: 1.453 ± 0.001

Composition: Non volatile matter $\geq 97\%$

Dosage / Use

0.1~0.3% of the total system

NOTE: As this additive can strongly reduce the surface tension of the mixture printing and painting testing and or adjustments to the printing ink should be made prior to use

Packaging and storage

Standard packaging: 50kg metal drum

Storage: Drum tightly sealed and away from direct light, between $0\sim 35^{\circ}\text{C}$

Use within 12 months

Wet Process PU Synthetic Leather

Description

DMF Purgative Accelerator for PU synthetic leather wet process. During simultaneous purging of DMF and water infiltration the dissolvability of PU resin declines sharply and eventually coagulates into a film.

If replacement the rates of DMF and water are the same wet coating with the same thickness can theoretically be obtained.

Usually the purgative rate of DMF plunges sharply when compared to infiltration speed of water with the surface of resin layer will solidifying firstly so the thickness reduces.

Because of the rapid solidification of PU resin surface the resin will re-dissolve which seriously impacts the surface smoothness and texture of synthetic leather.

Functions

- Effectively reduces the wet PU resin intermolecular cohesive force so the speed of DMF removal is greatly increased.
- Helps the PU resin form better foam cell structures, textures, thick uniform and smooth wet coating.
- Prevents curling and is particularly suited to the production of chamois-like leather.
- Adds anti-viscosity and hydrophobic properties to BASE suitable for Embossed leather, Nubuck leather, Bag leather and Wet garment leather.

Specifications

Appearance: Straw yellow or colorless transparent liquid

Structure: Anionic / Nonionic

Composition: Active content $\geq 99\%$

Dosage / Use

1~3 parts to 100 parts of 30% solid content PU resin

Packaging and storage

Standard packaging: 125kg plastic drum

Storage: Drum tightly sealed and away from direct light, between 0~35°C

Use within 12 months

Wet Process PU Synthetic Leather

Description

Synthesized polyether from 2-ethyl hexanol and epoxy hexane

Functions

- Strong penetration, emulsification, dispersion and purification ability

Specifications

Appearance: Straw yellow or colorless transparent liquid

Density: High viscosity to ointment

Ph: 7±0.5

Penetrating Strength: 100~120% @ 35°C standard value

Dosage / Use

Generally 0.8~2% of the total wet slurry system

NOTE: It is recommended to conduct tests for the exact dosage before use

Packaging and storage

Standard packaging: 125kg plastic drum

Storage: Drum tightly sealed and away from direct light, between 0~35°C

Use within 12 months

Wet Process PU Synthetic Leather

Description

Surfactant

Functions

- Used for the production of dense homogenous porous structures
- Delays rapid coagulation in the coagulation tank
- Help BASE remain flat and straight with better resilience
- Suitable for embossed leather, sport ball leather, bag leather, garment leather and tumbling leather

Specifications

Appearance: Straw yellow or colorless transparent liquid

Structure: Nonionic or cationic

Composition: Active ingredient $\geq 99\%$

Dosage / Use

0.5~1.2 parts to 100 parts PU resin which has a solid content of 30%

NOTE: It is recommended to conduct tests for the application and the exact dosage before use

Packaging and storage

Standard packaging: 200kg plastic drum

Storage: Drum tightly sealed and away from direct light, between 0~35°C.
Use within 12 months.

Wet Process PU Synthetic Leather

Description

Composite of ethers and sulfonated compounds

Functions

- High efficiency penetrant and foaming agent
- Adds excellent softening and wettability to the synthetic leather
- Accelerates the solidification rate
- Gives PU BASE an excellent porous structure
- Makes wet finished BASE more soft and plump

Specifications

Appearance: Straw yellow or colorless transparent high viscosity liquid

Penetrating strength: 100~120% @ 35°C standard value

Structure: Nonionic

pH: 5.5~7 (1% aqueous solution)

Dosage / Use

0.8~2% of the total wet resin slurry system

NOTE: It is recommended to conduct tests for application and exact dosage before use

Packaging and storage

Standard packaging: 125kg plastic drums

Storage: Drum tightly sealed and away from direct light, between 0~35°C.

Use within 12 months.