

Dispersants and Additives

for Coatings and Ink Applications

Pigment Dispersants and Wetting Agents

Huntsman JEFFSPERSE[®] dispersants are patented, nonionic, polymeric dispersants for aqueous pigment concentrates. JEFFSPERSE[®] dispersants are comb polymers containing pigment affinic groups that provide strong, cohesive adsorption onto the pigment surface, and water-compatible chains which, after adsorption onto the pigment surface, provide steric stabilization.

JEFFSPERSE® PIGMENT DISPERSANTS

| PRODUCT NAME | DESCRIPTION | FEATURES |
|-------------------------------|--|--|
| JEFFSPERSE [®] X3202 | Nonionic comb polymer with higher HLB and aromatic pigment-anchoring groups, 25% active dispersant in water | Designed to improve the dispersion of carbon black and organic pigments in aqueous media and function as a colorant acceptance additive for formulating base paints. |
| JEFFSPERSE [®] X3204 | Nonionic comb polymer with higher HLB and aromatic pigment anchoring groups, 40% active dispersant in water | Designed to improve the dispersion of carbon black and organic pigments in water-based ink formulations. Can be used in aqueous pigment concentrates, and in automotive, wood, furniture and industrial coatings. |
| JEFFSPERSE® X3503 | Nonionic comb polymer with lower HLB and aromatic pigment anchoring groups, 35% active dispersant in water | Designed to improve dispersion, lower viscosity, and boost stability of a variety of organic pigments and carbon black in water-based systems. Can be used with a wetting agent to provide even greater color strength. |
| JEFFSPERSE [®] 4105 | lonic comb polymer, 50% active dispersant in water | Offers the flexibility of a universal dispersant for a wide variety of organic pigment and inorganic pigment systems. Used for coloring concrete, façade coatings and wood stains. Reduces dispersion viscosity, allows higher pigment loadings, reduces particle reagglomeration and generates more stable pigment dispersions. |



OTHER ADDITIVE PRODUCTS FOR COATINGS AND INK APPLICATIONS

| PRODUCT NAME | STRUCTURE | FEATURES |
|--------------------------------|---|---|
| DGA [®] Agent | 2-(2-Aminoethoxy) Ethanol | Preparation of foam stabilizers, wetting and emulsifying agents, condensation polymers, photoresist strippers, and amides. |
| APMMEA-WB Amine Neutralizer | N-aminopropyl monomethylethanolamine, 20% water | APMMEA-WB Amine Neutralizer is a clear, low viscosity liquid, with a high flash point and mild odor. APMMEA-WB Amine Neutralizer provides optimum pH control, emulsion stability and enhanced pigment dispersion. APMMEA-WB Amine Neutralizer can help with formulation for low odor paints. The low freezing point (-40°C) may contribute to improved freeze-thaw stability. |
| AEEA | Aminoethylethanolamine | AEEA is used for synthesis of monomers, chelating agents, and surfactants. |
| JEFFADD® HEEU-98 | N-(2-Hydroxyethyl) ethylene urea | JEFFADD [®] HEEU-98 additive is a synthetic intermediate used to make adhesion promoters. |
| JEFFOX [®] PPG-Series | PPG-based polyols | Rheology regulators, freeze-thaw stabilizers, pigment carriers, plasticizers. |

About Huntsman

Huntsman Corporation is a publicly traded global manufacturer and marketer of differentiated and specialty chemicals with 2022 revenues of approximately \$8 billion from our continuing operations. Our chemical products number in the thousands and are sold worldwide to manufacturers serving a broad and diverse range of consumer and industrial end markets. We operate more than 60 manufacturing, R&D and operations facilities in approximately 30 countries and employ approximately 7,000 associates within our continuing operations. For more information about Huntsman, please visit the company's website at www.huntsman.com.

Huntsman Performance Products

Performance Products brings together innovation and world-leading process technologies to produce components used to formulate products that enhance people's lives. Our leading global positions in the manufacture and sale of amines, maleic anhydride and carbonates enable us to serve diverse consumer and industrial end markets, including energy, automotive and transportation, coatings and adhesives, construction and infrastructure, electronics, and industrial manufacturing. With 10 manufacturing facilities in North America, Europe, the Middle East and Asia, we produce and sell over 350 products to over 900 global customers, and provide extensive pre- and post-sales technical service support. The division had 2022 revenues of USD 1.7 billion.



www.huntsman.com/pp

HUNTSMAN

Enriching lives through innovation

Global Headquarters Americas

Huntsman Corporation 10003 Woodloch Forest Drive The Woodlands, Texas, 77380 USA Tel : +1-281-719-6000

Asia Pacific

Huntsman Performance Products No. 455 Wenjing Road Minhang Economic & Technological Development Zone Shanghai 200245 P. R. China Tel : +86-21-3357-6588

Europe, Middle East & Africa

Huntsman Performance Products Everslaan 45 B-3078 Everberg Belgium Tel : +32-2-758-9544

For more information, please contact your local Huntsman representative or drop us an email at pp_enquiry@huntsman.com

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