

Milliken® Specialty Chemicals and Intermediates

Anhydrides and Custom Blends

A broad chemistry portfolio with flexible manufacturing capabilities to produce unique products and custom solutions.

Milliken offers a variety of alkenyl succinic anhydrides, which may be used as curing agents for epoxy resins, corrosion inhibitors for lubricating oils, intermediates in the preparation of alkyd or unsaturated polyester resins and as intermediates in chemical reactions. In addition these alkenyl succinic anhydrides can be modified to their free acid versions useful in the fuel additives market as corrosion inhibitors and water removing agents.

Anhydride Products

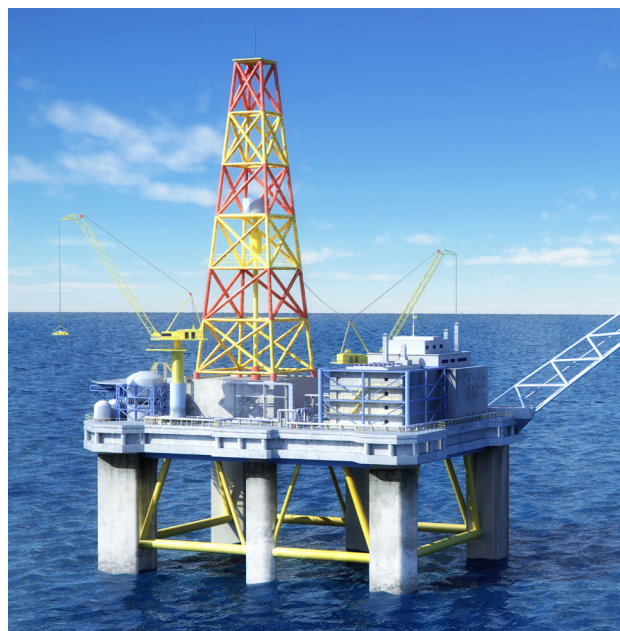
- Dodecenyl Succinic Anhydride (DDSA), C-12 branched
- commonly known as tetrapropenylsuccinic anhydride (TPSA)
- Octenyl Succinic Anhydride (OSA), C-8 linear
- Octadecenyl Succinic Anhydride (ODSA), C-18 linear
- Undistilled DDSA (DDSA-B)
- DDSA Residue (DDSA-2B)
- Hexahydrophthalic Anhydride (HHPA)

Anhydride Free Acid Products

- DDSA Free Acid in Aromatic 150
- DDSA Free Acid in Xylene
- OSA Free Acid

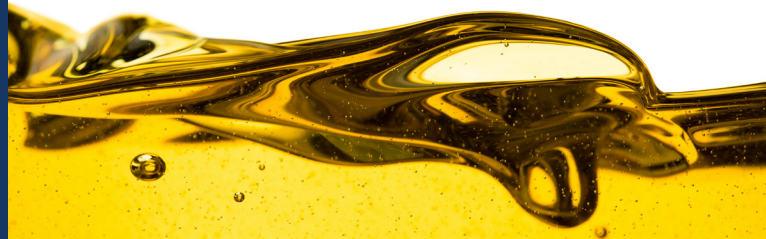
Anhydride Applications

- Corrosion inhibitors
- Epoxy curing
- Fuel additives
- Oil additives
- Plasticizers
- Starch modifiers
- Toner resins
- Unsaturated polyester resins



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Innovation and Manufacturing Excellence

For more than 50 years, Milliken & Company has been developing and manufacturing specialty products for our industrial partners. We pride ourselves on working closely with customers to deliver unique products and solutions that fit their needs and exceed their expectations. Milliken's laboratory facility uses the latest research tools and prepares product sample for customer testing, optimization and qualification. Our manufacturing facilities offer flexible capabilities over a broad range of equipment, with a fully dedicated pilot plant staff and equipment for scale up.

Our broad chemistry portfolio serves customers with specialty products in many applications and across several industries for a variety of uses, from coatings and electronics to personal care including:

- Surfactants
- Emulsifiers
- Dispersants
- Solubilizers
- Film Formers
- Lubricants/Emollients
- Gelling Agents
- Wetting Agents



Please contact your Milliken representative for any additional information.

PLEASE NOTE: As each customer's use of our product may be different, information we provide, including without limitation, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

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