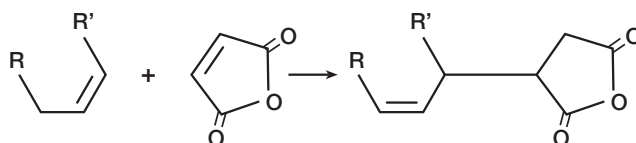


Description

18 ASA (alkenyl succinic anhydride) is a light-amber liquid at room temperature. ASA is produced from the reaction of isomerized olefins and maleic anhydride.



The isomerized olefins used to produce 18 ASA consist primarily of carbon chain length 18.

Applications

18 ASA is commonly used as a sizing agent in the alkaline production of paper. Other suggested uses include surfactant intermediate, engine oil lubricant additive, viscosity and pour-point improver, plasticizer, epoxy, antifreeze lubricant, moisture control for leather goods and corrosion inhibitor.

Features

Good thermal stability
 Melt processable
 Cost effective

Typical Properties

Color, Gardner	12
Viscosity @ 25 °C (77 °F), centistokes	225
Olefin content, wt %	2.0
Anhydride, mmol/g	3.0
Free acid, by FTIR, wt %	< 0.5
Specific gravity, 25 °C (77°F), g/mL	0.950
Flash point (Pensky-Martens), °C (°F)	201 (394)
Boiling point @ 5 mm Hg, °C (°F)	258 (496)
Vapor pressure @ 20 °C (68 °F), mm Hg	< 1

Specifications

Appearance	Clear, amber liquid
Color, Gardner, max	12
Viscosity @ 25°C (77°F), centistokes, max	275
Olefin content, wt %, max	3.0
Anhydride, mmol/g, min	2.75
Free acid, by FTIR, wt %, max	2.0

Shipping Information

Storage and Availability

18 ASA is not corrosive to carbon or stainless steel. Storage under a nitrogen blanket is recommended to prevent hydrolysis of the anhydride moiety.

18 ASA is available in tank trucks, rail cars and marine bulk loadings.

Shipping Classifications

Not regulated for transportation

Safety and Handling Information

With a rat oral LD₅₀ and rabbit dermal LD₅₀ both greater than 5000 mg/Kg, 18 ASA is expected to have a low level of acute toxicity. 18 ASA is not expected to cause skin or eye irritation. 18 ASA has been shown to induce skin sensitization in laboratory animals. 18 ASA was shown to be nonmutagenic in laboratory tests.

Chemical-resistant gloves, goggles and full-body protective clothing should be used for all operations where liquid contact is possible.

For information on the toxicology and safe handling of this product, please refer to the Material Safety Data Sheet, which is available upon request.

Chemical Registration Numbers

CAS: 28777-98-2
EINECS: 249-210-6

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Albemarle Corporation. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any information contained herein, including information about any health or safety hazards, only as a guide, and should take those precautions that are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein described materials or processes in violation of existing or future patents.



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