

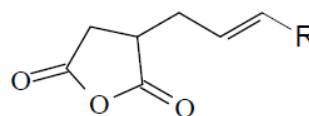
NSA

Nonenyl Succinic Anhydride

Description

NSA is a liquid succinic anhydride for curing low-viscosity epoxy resin. The advantages of NSA include long pot life as well as improved water resistance. NSA is manufactured from maleic anhydride and a mixture of branched olefin isomers. The olefin side chain is primarily the C9 trimer of propylene, which retains its double bond. NSA may be hydrolyzed to the dibasic acid with hot water. The acid may be reacted with amines or alkali metal aqueous bases. NSA readily forms mono- or di-esters.

Chemical Name: Nonenyl Succinic Anhydride
 Formula: $C_{13}H_{20}O_3$
 Molecular Weight: 224.3
 CAS Registry Number: 28928-97-4



R=C₆ Branched

Typical Applications for NSA Cured Epoxy Resins

- Electronic, Varnishes, Potting and Encapsulation
- Corrosion inhibitor for non-aqueous systems such as lubricants, hydraulic fluid and fuels.
- Detergent intermediate or hydrophobic, anionic surfactant for metal cleaning.

Specifications

Appearance	Clear Liquid
Color (Gardner)	5 Max.
% Free Acid	2.0 Max.
Acid Number	475 – 495
Boiling Point, °C	325
Viscosity @ 20°C	~ 150 cp
Specific Gravity	1.03

Typical Formulation

Bis A Epoxy (EEW 185-190)	100
NSA	110
BV7	1.5

Cure 1 hr @ 80°C + 3 hrs @ 130°C

Properties

Heat Deflection Temperature, °C	95
Elongation, @25°C	5%
Hardness, Shore D	85



Packaging and Storage: NSA is available in 210 kg steel drums and 5 gallon pails weighting 40 lbs net each.

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