

MATERIAL SAFETY DATA SHEET

Product Name: NMA

Catalog Number: 21350

Other Names: Nadic Methyl Anhydride, Methyl Norbornene Dicarboxylic Anhydride

DOT Hazard Class: Corrosive Liquid, n.o.s.

DOT Proper Shipping Name: Methyl Norbornene Dicarboxylic Anhydride

UN ID No.: UN 1760

MSDS Updated: 9/2011

Distributed By: Ladd Research Industries

83 Holly Court

Williston, VT 05495

(802) 658-4961

HAZARDOUS COMPONENTS

	<i>CAS Number</i>	<i>Percent</i>	<i>Exposure Limits</i>
NMA	25134-21-8	99% min.	None Available
Free Acid	None Listed	1% max.	None Available

PHYSICAL AND CHEMICAL DATA

Boiling Point: 140°C @ 10 mm Hg

Specific Gravity: 1.245 at 15.4/4°C

Vapor Pressure: 5.0 mm Hg at 120°C

Vapor Density: 6.1 at 20°C

Melting Point: <18°C

Solubility: Soluble in acetone, benzene, naphtha, xylene

FIRE AND EXPLOSION HAZARD DATA

Flash Point: 135°C

Flammable Limits: Unknown

Extinguishing Media: Foam, carbon dioxide

Special Fire Fighting Procedures: Respiratory protection against vapors and combustion products

Unusual Fire & Explosion Hazards: Vapors and fumes can cause serious respiratory problems.

HEALTH HAZARD DATA

Primary Routes of Entry: Inhalation, skin, eyes

Inhalation: Nasal irritation, discharge, coughing, difficulty in breathing

Skin: Erythema, itching

Eye: Conjunctivitis, chemosis

Ingestion: Unknown. Probably pain, nausea, vomiting

EMERGENCY AND FIRST AID

Inhalation: Remove person to fresh air

Skin: Immediately flush skin with plenty water for at least 15 minutes.

Eye: Immediately flush eyes with plenty water for at least 15 minutes. Seek medical attention.

Ingestion: If person is conscious give water or milk to dilute. DO NOT induce vomiting. Do not attempt chemical neutralization. Obtain medical assistance.

REACTIVITY DATA

Stability: Stable at ambient temperatures. Decomposes at elevated temperatures.

Hazardous Polymerization: May occur at >200°C.

Conditions to Avoid: Excessive temperatures.

Incompatibility: Water, acid, base, oxidizing material

SPILL, DISPOSAL AND STORAGE INFORMATION

Spill: Clean up spill promptly. Avoid contact with liquid and vapors. Ventilate confined areas. Absorb spills with inert absorbent.

Disposal: Deposit absorbent material saturated with product in a separate, labeled, leak-proof container and take to an approved treatment, storage or disposal facility. Disposal must abide by federal, state and local regulations.

PROTECTIVE EQUIPMENT AND CONTROL MEASURES

Respiratory: Organic vapor respirator if using away from chemical hood.

Gloves: Impervious (e.g. nitrile, butyl rubber)

Eye: Safety glasses with side shields. Full face shield if danger of splashing is present.

Ventilation: Chemical fume hood recommended.

SECTION 313 SUPPLIER NOTIFICATION

Not regulated.



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