

Material Safety Data Sheet

1. Product and Company Identification

Trade name: NSR150 and NSR250
Description: Photopolymerizable acrylic resin
Manufacturer: North Sea Resins, A Division of MedHesives, Inc

950 Danby Road, Suite 300
Ithaca, NY 14850
Tel: 607 272 0409 (M-F: 8am-6pm)

2. Composition/Information on Ingredients

Acrylate monomers	40-60 wt. %
Acrylate polymers	40-60 wt %
Photoinitiator	1-2 wt. %
N,N-dimethyl-p-toluidine (CAS # 99-97-8)	0-0.5 wt. %

OSHA Regulatory Status

While this material and its ingredients are not classified as hazardous under OSHA regulations, this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

3. Hazards Identification

Emergency Overview

White/yellowish very viscous liquid with slight ester odor. Solidifies under intense light.

Potential Health Effects

Eye: direct contact may cause slight irritation.

Skin: prolonged or repeated contact may cause irritation and sensitization. Suspected absorption hazard.

Ingestion: may cause mouth, throat, esophagus and stomach irritation, nausea, vomiting and diarrhea.

Inhalation: prolonged overexposure to vapors and spray mist in poorly ventilated areas may cause nose and throat irritation.

Chronic Health Effects

N,N-dimethyl-p-toluidine is listed as a potential mutagen by NIOSH and RTECS, but is not expected to present a significant hazard due to its low concentration.

4. First Aid Measures

Eye: in case of contact, flush immediately with copious amounts of water for at least 15 minutes and get medical attention.

Skin: in case of contact, wash thoroughly with soap and water, and flush with lukewarm water for 15 min. Clean contaminated clothes and shoes.

Ingestion: if swallowed, wash out mouth with water provided person is conscious, and seek medical attention immediately.

Inhalation: if affected by vapors or spray mist, remove to fresh air. Seek medical attention if necessary.

5. Fire Fighting Measures

Flammability Properties

Flashpoint: N/DA
Flammable Limits (% volume in air)
Lower: N/DA Upper: N/DA
Autoignition Temperature: N/DA
N/DA: no data available

Extinguishing Media

Water spray, carbon dioxide, dry chemical powder or foam.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions.
Heat-induced polymerization may cause closed containers to rupture or explode.

Firefighter Protection

Wear self-contained breathing apparatus and protective clothing.
Notify authorities if liquid enters sewer/public waters.

6. Accidental Release Measures

Precautions if Material is Spilled or Released

Extinguish all ignition sources and ventilate area. Wear self-contained breathing apparatus and protective clothing during clean-up. Dike and recover large spills. Contain and remove small spills with inert absorbents (vermiculite, clay) and non-sparking tools, and place in vented disposal container. Wash spills with strong detergent and minimum of water. Dispose/report according to regulatory requirements.

Waste Disposal Methods

Dispose of in accordance with local, state and federal regulations. Do not incinerate closed containers. Incinerate in approved facility.

7. Handling and Storage

Do not store at/below 32F -- inhibitor can separate as a solid -- and above 100F -- because of heat-induced polymerization. Store in tightly closed, properly vented container away from: heat, sparks, open flame, strong oxidizers, radiation and other initiators.

Do not blanket or mix with oxygen-free gas, as it renders the inhibitor ineffective.

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

Engineering Controls

If handling results in aerosol or vapor generation, general clean air dilution or local exhaust ventilation is recommended.

Personal Protective Equipment

Eye: avoid contact. Use safety eyewear with splash guards or side shields.

Skin: if potential exists for repeated or prolonged contact, wear plastic gloves and other protective clothing.

Respiratory: if material handled at elevated temperatures or under mist forming conditions, wear mechanical filter respirator.

General Hygiene: Eye wash fountains and safety shower.

Exposure Guidelines

ACGIH TLV: N/E
OSHA PEL: N/E
N/E: none established

9. Physical and Chemical Properties

Appearance: White/Yellowish viscous liquid

Odor: mild ester

Boiling point: N/A

Freezing point: N/A

pH: N/A

Vapor pressure: N/A

Vapor density: N/A

Solubility in water: insoluble

Specific gravity (cal.): 1.16 @ 77°F (25°C)

Viscosity (Brookfield): 83,760 cps @ 77°F (25°C)

N/A: not applicable

10. Stability and Reactivity

Stability: stable

Conditions to avoid: elevated temperatures, localized heat sources, oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing.

Incompatibilities: strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers, acids, acid chlorides, acid anhydrides.

Hazardous decomposition products: under fire conditions, possible release of carbon monoxide, carbon dioxide, nitrogen oxides, acrid smoke-fumes.

Hazardous polymerization: may occur under elevated temperatures, intense light or depletion of inhibitor.

11. Toxicological Information

No toxicological investigation of the product as a whole has been performed.

Acute Effects

May be harmful by eye and skin contact, skin absorption, inhalation and ingestion.

N,N dimethyl-p-toluidine: RTECS # XU5803000

IHL-RAT LC50: 1400 mg/m³/4h

NTIS** OTS0573706

IPR-MUS LD50: 212 mg/kg

AISFAR 1,284,1951

Only selected registry of toxic effects of chemical substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

12. Ecological Information

No data available on the product or its components.

13. Disposal Considerations

Non-contaminated, properly inhibited product is not a RCRA hazardous waste. However, contaminated product/soil/water may be RCRA/ASHA hazardous waste due to potential for internal heat generation. It is the responsibility of the waste generator to determine at the time of disposal whether the product meets the criteria of hazardous waste.

Dispose of in accordance with local, state and federal regulations. Do not incinerate closed containers. The material may be dissolved with a combustible solvent and

burnt in a chemical incinerator equipped with an afterburner and scrubber.

14. Transport Information

DOT shipping name: Unrestricted

DOT and IATA Hazard Classification: Unrestricted

DOT and IATA Number: None

15. Regulatory Information

California proposition 65 Information: this product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

This material contains an inhibitor (HQ, MEHQ, etc.) at <1%. The type and amount meet product specifications.

N,N dimethyl-p-toluidine

NOHS 1974: HZD M3033; NIS 29; TNF 2356;
NOS 19; TNE 31063

NOES 1983: HZD M3033; NIS 42; TNF 2570;
NOS 43; TNE 62720; TFE 27118

EPA TSCA section 8(B) Chemical Inventory
EPA TSCA Test Submission (TSCATS) data
base, April 1995

NIOSH Analytical Method, 1994: Amines,
Aromatic, 2002.

16. Other Information

Qualifiers and quotes used in this MSDS

N/DA: no data available

N/A: not applicable

N/E: none established

MSDS prepared by: MedHesives, Inc.

17. Disclaimer

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources that we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable. This MSDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and following the American National Standard for Hazardous Industrial Chemicals – Material Safety Data Sheets – Preparation (ANSI Z400.1 - 1998).