



"Environmentally Responsible Resin Systems"

MATERIAL SAFETY DATA SHEET

NOVOC Performance Resins, LLC
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IN CASE OF EMERGENCY CALL CHEMTREC 1-800-424-9300
CONTACT ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK,
FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS.

Product Name: NOVOXY 9004, Epoxy Resin Blend

Effective Date: 11/19/04

1. INGREDIENTS:

Reaction products of Epichlorohydrin and Bisphenol A

(CAS# 25085-99-8) <90%

Alkyl Glycidyl Ether

(CAS# 68609-97-2) <10%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not Hazardous per this OSHA Standard may be listed. Where proprietary Ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: not applicable

VAP PRESS: not applicable

VAP DENSITY: not applicable

SOL. IN WATER: none

SP. GRAVITY: 1.1-1.13

APPEARANCE: Straw colored liquid.

ODOR: faint epoxy odor

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 245°F

METHOD USED: PMCC

FLAMMABLE LIMITS

LFL: not applicable

UFL: not applicable

EXTINGUISHING MEDIA: foam, CO₂, dry chemical

FIRE AND EXPLOSION HAZARDS: none.

FIRE-FIGHTING EQUIPMENT: Wear positive pressure SCBA.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Excess heating over long periods of time degrades the resin.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Base.

HAZARDOUS DECOMPOSITION PRODUCTS: The by-products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water. The

thermal decomposition products of epoxy resins therefore should be treated as potentially hazardous substances, and appropriate precautions should be taken.
HAZARDOUS POLYMERIZATION: Will not occur by itself but masses more than 1 pound of product plus aliphatic amine will cause irreversible polymerization with considerable heat buildup.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Soak up in absorbent material and collect in suitable containers. Residual may be removed using steam or hot soapy water.

DISPOSAL METHOD: Burn in adequate incinerator or bury in an approved landfill; in accordance with local, state and federal regulations.

6. HEALTH HAZARD DATA:

EYE: Minor transient irritation. No corneal injury likely.

SKIN CONTACT: May cause allergic skin reaction in susceptible individuals. Prolonged exposure not likely to cause significant skin irritation. Repeated exposure may cause skin irritation.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The LD₅₀ for skin absorption in rabbits is 20,000 mg/kg.

INGESTION: Low acute oral toxicity; LD₅₀ (rat) greater than 4000 mg/kg. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Vapors are unlikely due to physical properties. Not a problem unless heated to high temperature.

SYSTEMIC AND OTHER EFFECTS: Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects. A poorly characterized sample of low molecular weight epoxy resin of this type has been reported to produce skin cancer in a highly sensitive strain of mice. However, high levels of impurities compromise the validity of the findings. Epoxy resin that is representative of current manufacturing processes is not believed to be a cancer hazard to humans. Results of mutagenicity tests in animals have been negative. Has been shown to be negative in some in vitro mutagenicity tests and positive in others.

7. FIRST AID:

EYES: Irrigation of the eye immediately with water for fifteen minutes is a good safety practice.

SKIN: Contact will probably cause no more than irritation. Wash off in flowing water or shower. Wash clothing before reuse.

INGESTION: Low in toxicity. No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Remove to fresh air if effect occurs. Consult medical personnel.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

VENTILATION: Good room ventilation usually adequate for most operations.

RESPIRATORY PROTECTION: None normally needed.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. Use impervious gloves when prolonged or frequently repeated contact could occur.

EYE PROTECTION: Use chemical goggles.

9. ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Practice good caution and personnel cleanliness to avoid skin and eye contact. Avoid breathing vapors of heated material.

10. NFPA HAZARD RATING:

4 = EXTREME	HEALTH	1
3 = HIGH	FIRE	1
2 = MODERATE	REACTIVITY	0
1 = SLIGHT	SPECIFIC	-
0 = INSIGNIFICANT		

11. REGULATORY INFORMATION:

STATUS ON SUBSTANCE LISTS:

The concentrations shown in this document are maximum or ceiling levels (expressed in weight %, unless otherwise specified) to be used for regulations. Trade Secrets are indicated by "TS".

FEDERAL EPA:

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, and LIABILITY ACT of 1980 (CERCLA):

Requires notification of the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQ's) in 40 CFR 302.4 .

Components present in this product at level which could require reporting under the statute are:

Chemical Name	CAS Number	% By Weight	RQ
NONE			

OSUPERFUND AMENDMENTS and REAUTHORIZATION ACT of 1986 (SARA) TITLE III:

Sections 301-304 require emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355. Components present in this product at a level which could require reporting under this statute are:

Chemical Name	CAS Number	% By Weight
NONE		

Sections 311-312 require products be reviewed and applicable EPA Hazard Definitions be identified and made known.

EPA HAZARD CLASSIFICATIONS:

Acute Hazard	Chronic Hazard	Fire Hazard	Pressure Hazard	Reactive Hazard	Hazard
no		no	no	no	no

Section 313 requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in this product at level which could require reporting under the statute are:

Chemical Name	CAS Number	% By Weight
NONE		

If you are unsure if you must report more information, call the EPA Emergency Planning and Right-To-Know Hot Line: 800-535-0202 or 202-479-2449.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The components of this product are contained on the chemical substance inventory list.

OTHER REGULATORY INFORMATION:

D.O.T. Shipping Name:

Not Regulated By D.O.T.

The information herein is given in good faith, but no warranty expressed or implied is made. NOVOC Performance Resins, LLC urges suppliers and users of this product to evaluate its suitability and compliance with local regulations as NOVOC Performance Resins, LLC cannot foresee the nature of the final application nor final location of usage.