

1. CHEMICAL AND COMPANY IDENTIFICATION**Product Identifier:** EPOXY COATING COMPOUND, PART B**General Use:** Formulated Epoxy Curing Agent.**Company:** Douglas and Sturges, Inc.
1023 Factory Street, Richmond, Ca, 94801**Phone Number:** 510-235-8411**Emergency Phone:** CHEMTREC 1-(800)-424-9300**2. HAZARDS IDENTIFICATION****CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:**

Acute Toxicity: Oral – Category 4
 Acute Toxicity: Skin – Category 4
 Skin corrosion/irritation – Category 1B
 Serious eye damage/eye irritation – Category 1
 Germ Cell Mutagenicity – Category 2
 Skin sensitization – Category 1
 Toxic to reproduction [Fertility] - Category 2
 Toxic to reproduction [Unborn child] - Category 2
 Specific target organ toxicity (repeated exposure): skin [central nervous system (CNS)] - Category 2
 Aquatic hazard (acute) - Category 3
 Aquatic hazard (long-term) - Category 3

GHS LABEL ELEMENTS:**PICTOGRAMS:****SIGNAL WORD:** Danger**HAZARD STATEMENTS:**

Harmful if swallowed. Causes severe skin burns and eye damage. Suspected of damaging fertility or the unborn child. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure in contact with skin. (central nervous system (CNS)) Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection: Recommended: Wear face shield and goggles. Wear protective clothing. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Collect spillage. Get medical attention if you feel unwell. If exposed or concerned: Get medical attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call A POISON CENTER or physician if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical attention.

STORAGE: Store locked up.**DISPOSAL:** Dispose of contents and container in accordance with all local, regional, national, and international regulations.**HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS:** None known.**3. COMPOSITION / INFORMATION ON INGREDIENTS****SUBSTANCE/MIXTURE:** Mixture

Ingredient Name	%	CAS number
Nonylphenol	40-100	84852-15-3
Trimethylolpropane polyoxypropylene triamine	40-100	39423-51-3
N-Aminoethylpiperazine	0.1-10	140-31-8
Phenol	0.1-1	108-95-2
1-Nonene	0.1-1	124-11-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

GENERAL INFORMATION: Get medical attention if irritation or other symptoms occur. Remove contaminated shoes and clothing before seeking medical attention.

EYE CONTACT: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Chemical burns must be treated promptly by a physician.

INHALATION: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SKIN CONTACT: In case of skin contact, wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

INGESTION: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY:

Notes to physician: Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

Specific Treatment: No specific recommendations

Protection of first aid personnel: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the surrounding area.

UNSUITABLE EXTINGUISHING MEDIA: None known.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides.

SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIREFIGHTERS: Wear approved positive pressure, self-contained breathing apparatus (SCBA) and full body protective clothing.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Wear appropriate protective clothing, gloves and safety glasses to prevent eye and skin contact.

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

CONTAINMENT: Contain spill and prevent/minimize release to the environment.

METHODS FOR CLEAN UP: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, watercourses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor.

Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Put on appropriate personal protective equipment (see Section 8). Avoid contact with skin and eyes. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

STORAGE: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls

VENTILATION: Use with adequate ventilation

LOCAL EXHAUST: Not necessary under normal usage. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

OCCUPATIONAL EXPOSURE LIMITS: None known.

Personal Protection Equipment(PPE)

RESPIRATORY PROTECTION: No protection is ordinarily required under normal conditions of use and with adequate ventilation. Should a respirator be needed, follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators equipped with organic vapor cartridges.

HAND PROTECTION: Handle with gloves. Wear any liquid-tight gloves such as butyl rubber, neoprene, or PVC.

EYE PROTECTION: Wear safety glasses with side shields.

PROTECTIVE CLOTHING OR EQUIPMENT: Not normally required. Provide eye bath and safety shower.

OTHER PROTECTIVE MEASURES: Observe good personal hygiene measures, such as washing after handling material, especially before eating, drinking, and smoking.

COMMENTS: Never eat, drink, or smoke in work areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Viscous Liquid
Odor/Odor Threshold:	Mild odor
pH:	N.A. (non-aqueous)
Melting Point:	No data available
Freezing Point:	<-10°C (<14°F)
Boiling Point:	220.4°C (428.7°F)
Flash Point:	Closed cup: 99°C (210.2°F)
Evaporation Rate:	No data available
Flammability Limits:	No data available
Flammability Limit—Upper(% by Volume):	Not applicable
Flammability Limit—Lower(% by Volume):	Not applicable
Vapor Pressure:	0.13 kPa (0.975 mm Hg) [room temperature]
Vapor Density:	No data available
Relative Density:	No data available
Solubility in Water:	No data available
Solubility in Solvent:	No data available
Partition Coefficient: n-octanol/water:	5.4
Auto-ignition Temperature:	>300°C (>572°F)
Decomposition Temperature:	No data available
Viscosity:	No data available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: No specific test data related to reactivity available for this product or its ingredients.

REACTIVITY: Stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTION: Under normal conditions of storage and use, hazardous reactions will not occur.

CONDITIONS TO AVOID: Extremes of temperature and direct sunlight.

INCOMPATIBLE MATERIALS: Reactive or incompatible with the following materials: acids.

HAZARDOUS DECOMPOSITION PRODUCTS: None known under normal storage and handling conditions.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE

SKIN CONTACT: No data available.

EYE CONTACT: No data available.

INHALATION: No data available

INGESTION: No data available

ACUTE TOXICITY: No data available.

SKIN CORRISSON/IRRITATION: No data available.

SERIOUS EYE DAMAGE/ EYE IRRITATION: No data available.

RESPIRATORY/ SKIN SENSITIZATION: No data available..

GERM CELL MUTAGENICITY: No data available.

CARCINOGENICITY: No data available.

REPRODUCTIVE TOXICITY: No data available.

SPECIFIC TARGET ORGAN TOXICITY (Single or Repeated Exposure):
 No data available.
ASPIRATION HAZARD: No data available
CHRONIC EXPOSURE: No data available
POTENTIAL HEALTH EFFECTS - MISCELLANEOUS: No data available



12. ECOLOGICAL INFORMATION
TOXICITY: No Data.
PERSISTENCE AND DEGRADABILITY: No Data.
BIOACCUMULATIVE POTENTIAL: No Data.
MOBILITY IN SOIL: No Data.
OTHER ADVERSE EFFECTS: No Data.



13. DISPOSAL CONSIDERATIONS
DISPOSAL: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Disposal of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
 Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Proper Shipping Name:

DOT: ALKYLPHENOLS, LIQUID, N.O.S. (Nonyl phenol). Marine pollutant
TDG: ALKYLPHENOLS, LIQUID, N.O.S. (Nonyl phenol). Marine pollutant
IMDG: ALKYLPHENOLS, LIQUID, N.O.S. (Nonyl phenol). Marine pollutant
IATA: ALKYLPHENOLS, LIQUID, N.O.S. (Nonyl phenol)

Regulatory Information	UN Number	Class	PG	Label	Additional Information
DOT Classification	UN3145	8	II		-
TDG Classification	UN3145	8	II		-
IMDG Classification	UN3145	8	II		<u>Emergency schedules</u>

					(EmS) F-A S-B
IATA Classification	UN3145	8	II		<u>Passenger and Cargo Aircraft</u> Quantity limitation: 1 L Packaging instructions: 851 <u>Cargo Aircraft Only</u> Quantity limitation: 30 L Packaging instructions: 855

15. REGULATORY INFORMATION

Inventory Status: On or in compliance with the inventory for the following:

Australia (AICS):
 China Inv. Existing Chemical Substances (IECSC):
 Japan (ENCS) List:
 Korea Existing Chemicals Inv. (ECL):
 Philippines (PICCS):
 US (TSCA) Inventory:
 Taiwan (CSNN):

U.S. Federal Regulatory Information
CERCLA Regulated Chemicals:
 Ingredient name: Phenol, Concentration: 1%, Section 304 CERCLA
 Hazardous substance: Listed

Sara 311, 312 : Immediate (acute) health hazard, Delayed (chronic) hazard.

Clean Air Act section 112(b) Hazardous air pollutants (HAPs)	Product Name	Concentration %
	Phenol	0-1

SARA 313 Form R-

Reporting requirements	Product Name	Concentration %
	Phenol	0-1

U.S. State Regulations

California proposition 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Pennsylvania RTK: Phenol

Canadian Regulations

CP DSL: All components are listed or exempted.

WHMIS Classes: Class D-2B: Material causing other toxic effects (Toxic). Class E: Corrosive material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Brazil Regulations

Classification system used: Norma ABNT-NBR 14725-2:2012

Disclaimer: This data is offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

Date Prepared/Revised: 10/29/2015

16. OTHER INFORMATION

Hazardous Material Information System III (U.S.A.):

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

NFPA:

Health Hazards: 1

Flammability: 0

Instability: 0

Physical and Chemical

Properties –

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

Training Advice: Train personnel using this product in proper chemical handling, engineering controls and protective equipment.

Recommended Uses and Restrictions: This product is intended for industrial/professional use only.