

## SAFETY DATA SHEET



## 271 Epoxy Novolak Matte Reinforced System (SAT), Part A, Hardener

Date Issued : 05/07/2015

SDS No : SCC-271A

Date Revised : 06/17/2020

Revision No : 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 271 Epoxy Novolak Matte Reinforced System (SAT), Part A, Hardener**PRODUCT DESCRIPTION:** Epoxy Novolak Matte Reinforced System (SAT), Part A, Hardener**PRODUCT CODE:** 271GA**PRODUCT FORMULATION NAME:** 271 Epoxy Novolak Matte Reinforced System (SAT), Part A, Hardener**CHEMICAL FAMILY:** Aromatic/Aliphatic Amine Mixture**MANUFACTURER**

Sauereisen  
160 Gamma Drive  
Pittsburgh, PA 15238

**Emergency Contact:** John Kozak**Emergency Phone:** (800)444-8235**Alternate Contact:** Anthony Comport**Customer Service:** 412 963-0303**E-Mail:** jakozak@sauereisen.com**24 HR. EMERGENCY TELEPHONE NUMBERS**

Poison Control Center (Medical):1-800-222-1222

CHEMTREC (US Transportation): 1-800-424-9300

CHEMTREC (Canada Transportation):1-703-527-3887

## 2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATIONS****Health:**

Skin Corrosion, Category 1C  
Acute Toxicity (Inhalation), Category 5  
Serious Eye Damage, Category 1  
Respiratory Tract Irritation, Category 3  
Respiratory Sensitization, Category 1B  
Acute Toxicity (Oral), Category 4  
Acute Toxicity (Dermal), Category 4

**Environmental:**

Acute Hazards to the Aquatic Environment, Category 3

**GHS LABEL**

Corrosion

Exclamation  
markHealth  
hazard**SIGNAL WORD:** DANGER**HAZARD STATEMENTS**

H315: Causes skin irritation.  
H333: May be harmful if inhaled.  
H318: Causes serious eye damage.  
H314: Causes severe skin burns and eye damage.  
H312: Harmful in contact with skin.  
H402: Harmful to aquatic life.  
H302: Harmful if swallowed.

**PRECAUTIONARY STATEMENTS**

**Prevention:**

- P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
 P264: Wash ... thoroughly after handling.  
 P285: In case of inadequate ventilation wear respiratory protection.  
 P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P270: Do not eat, drink or smoke when using this product.

**Response:**

- P302+P352: IF ON SKIN: Wash with plenty of water/...  
 P312: Call a POISON CENTER/doctor/...if you feel unwell.  
 P322: Specific measures (see ... on this label).  
 P362: Take off contaminated clothing.  
 P304+P312: IF INHALED: Call a POISON CENTER/doctor/...if you feel unwell.  
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P310: Immediately call a POISON CENTER/doctor/...  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
 P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...  
 P301+P312: IF SWALLOWED: Call a POISON CENTER/ doctor/...if you feel unwell.  
 P330: Rinse mouth.  
 P370+P378: In case of fire: Use carbon dioxide, foam, dry chemicals, or sand to extinguish.

**Storage:**

- P405: Store locked up.  
 P403+P235: Store in a well-ventilated place. Keep cool.

**Disposal:**

- P501: Dispose of contents/container in accordance with local/national regulations.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	Wt.%	CAS
3,6-diazaoctanethylenediamine	< 40	112-24-3
Diethylmethylbenzenediamine	< 50	68479-98-1
Benzyl Alcohol	< 30	100-51-6

**4. FIRST AID MEASURES**

**EYES:** Remove contact lenses if present. Hold eyelids apart, initiate and maintain gentle and continuous irrigation until patient receives medical care. If prompt medical care is not available, continue irrigation for one hour. Rinse under eyelids with plenty of water for at least 20 minutes.

**SKIN:** Immediately remove contaminated clothing and flush skin with water for at least 20 minutes. Cover any wound with a sterile dressing. Seek immediate medical attention.

**INGESTION:** Do not induce vomiting. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side. Seek medical attention.

**INHALATION:** If difficulty breathing, move to fresh air once. For acute overexposure, give oxygen if breathing is difficult. Apply artificial respiration if breathing has stopped. Keep patient warm and at rest. Seek immediate medical attention.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE**

**EYES:** Product vapor in low concentration can cause lacrimation, conjunctivitis and corneal Edema when absorbed into the eye tissue. Corneal edema may give rise to a perception of a blue haze or fog around lights. The effect is transient.

**SKIN:** Severe skin irritant, and sensitizer. Contact causes severe irritation and pain, may cause burns and permanent injury.

**INGESTION:** Ingestion may cause bleeding of the gastrointestinal tract and the vomiting of blood.

**INHALATION:** Inhalation of vapors may severely damage tissue and produce scarring.

**ACUTE EFFECTS:** May cause burns to skin and eyes. May cause permanent eye injury. High concentration of vapors can

cause severe irritation of eyes and respiratory tract.

**CHRONIC EFFECTS:** Prolonged or repeated exposure may cause asthma and skin sensitiation or other allergic response.

**NOTES TO PHYSICIAN:** Further treatment may be necessary. Contact local poison control center. Rinse mouth.

Application of corticosteroid cream has been effective in treating skin irritation.

## 5. FIRE FIGHTING MEASURES

**GENERAL HAZARD:** Flammable in presence of open flame, sparks, excessive heat and static discharge.

**EXTINGUISHING MEDIA:** Do not use water, which may spread fire. Extinguish with foam, dry chemical, carbon dioxide, earth or sand.

**HAZARDOUS COMBUSTION PRODUCTS:** May generate ammonia and toxic nitrogen oxide gasses. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from firefighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated.

**EXPLOSION HAZARDS:** Dusts and aerosols at sufficient concentrations may exhibit explosive characteristics if ignited by static discharge or spark. Exercise care during dusting or misting operations such as grinding or drilling.

**FIRE FIGHTING PROCEDURES:** Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

**FIRE FIGHTING EQUIPMENT:** Toxic fumes will be evolved when this material is involved in a fire. Self-contained breathing apparatus should be available for fire fighters.

**FIRE EXPLOSION:** Containers may explode in heat of fire; cool containers with water. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point.

**SENSITIVE TO STATIC DISCHARGE:** None

**SENSITIVITY TO IMPACT:** None

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide, nitrogen oxides, and/or ammonia.

## 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILL:

Avoid contact with material. Persons not wearing appropriate protective equipment should be excluded from the area of spill until clean-up is complete. Stop spill at source. Dike area to prevent spreading. Remaining product may be taken up by clay, diatomaceous earth or other absorbent and shoveled into disposal containers such as a dumpster or other common garbage receptacle. Residual material may be removed using steam or hot soapy water. Keep spark-producing equipment away from area. Observe environmental regulations and report spills as required to appropriate authorities.

**LARGE SPILL:** For large spills, dike and collect with absorbent material. Flushed cleaned areas with water being careful not to allow run-off to enter drains, sewers or streams. Observe Environmental regulations. Wear PPE - gloves, rubber boots, and safety glasses.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Avoid contact with eyes, skin, and clothing. For industrial use only! Harmful if inhaled. Do not take internally. May cause irritation. Do not eat, drink or smoke when using this product. Wear chemical splash goggles, gloves and protective clothing. Avoid high ambient temperatures and humidity. Wash thoroughly after handling.

**STORAGE:** Store in a cool, dry place.

Keep container closed when not in use.

Store away from direct heat and flame.

Keep away from food and drinking water.

Store out of direct sunlight.

DO NOT SMOKE where product is used or stored.

Store in a well-ventilated place.

Do not store in reactive metal containers.

Do not store near acids.

Always mix well before using.

**SPECIAL SENSITIVITY:** DO NOT USE sodium nitrate or other nitrosating agents in formulations containing this product.

Suspected carcinogen nitrosamines could be formed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)			
Chemical Name	EXPOSURE LIMITS		
	Type	ppm	mg/m <sup>3</sup>
3,6-diazaoctanethylenediamine	OSHA PEL	TWA	1
Benzyl Alcohol	ACGIH TLV	TWA	10

**ENGINEERING CONTROLS:** Breathing vapors must be avoided. Ventilation must be sufficient to control vapors. This material should be confined as far as possible within sealed or covered equipment in which case normal ventilation should be adequate. Special (local) ventilation will be needed in areas where vapors are expected to be vented.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Splashproof, chemical resistant safety goggles or face shield. Eye bath nearby. Contact lenses should not be worn.

**SKIN:** Impervious gloves, neoprene, or other suitable long sleeved and legged clothing. Launder clothing before reuse.

**RESPIRATORY:** Use organic vapor cartridges in respirators. If TLV of any component is exceeded use appropriate respiratory protection or ventilate in accordance with OSHA Regulation 29 CFR Part 1910.V.

**WORK HYGIENIC PRACTICES:** Wash thoroughly after handling. Safety shower and eyewash station should be within direct access. Keep containers closed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point (°C)
Benzyl Alcohol	200

**ODOR:** Ammonia

**APPEARANCE:** Liquid

**COLOR:** Yellowish.

**pH:** Alkaline.

**PERCENT VOLATILE:** 35

**FLASH POINT AND METHOD:** (350°F) to (375°F)

**FLAMMABLE LIMITS:** NE to NE

**VAPOR PRESSURE:** < 0.09 mm Hg

**VAPOR DENSITY:** > 1

**BOILING POINT:** > (455°F)

**SPECIFIC GRAVITY:** 1 to 1.1

**(VOC):** 15

## 10. STABILITY AND REACTIVITY

**REACTIVITY:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Stable under normal conditions of use and storage.

**CONDITIONS TO AVOID:** Do not store in iron, zinc, galvanized or other reactive metal containers.

**POSSIBILITY OF HAZARDOUS REACTIONS:** CAUTION! N-Nitrosamines, many of which are known potent carcinogens, may be formed if exposed to nitrous acid, nitrites, or atmospheres with high nitrous oxide concentrations. Product slowly corrodes copper, aluminum, zinc, iron, and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxides, possibly creating an explosion. Reactive with hydroxyl compounds, nitrites, nitrosating agents. Vigorous reaction accompanied by large heat release when mixed with acids. Generated heat may cause vigorous boiling.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Nitric Acid. Ammonia. Nitrogen oxides. Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide. Aldehydes. Flammable hydrocarbon fragments (i.e. acetylene.) Nitrosamine.

**INCOMPATIBLE MATERIALS:** (Materials to avoid) mineral acids, organic acids, oxidizing agents, and reactive metals.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

Chemical Name	ORAL LD <sub>50</sub>	DERMAL LD <sub>50</sub>	INHALATION LC <sub>50</sub>
Benzyl Alcohol	1 230	2000	1 000

**DERMAL LD<sub>50</sub>:** No data is available on the product itself.

**Notes:** Components:

Diethyltoluenediamine (DETDA): LD50, rat: 700 mg/kg

Triethylenetetramine (TETA): LD50, rabbit: 805 mg/kg

Benzyl Alcohol: LD50, rabbit: 2000 mg/kg

**ORAL LD<sub>50</sub>:** No data is available on the product itself.

**Notes:** Components:

Diethyltoluenediamine (DETDA): LD50, rat: 485 mg/kg

Triethylenetetramine (TETA): LD50, rat: 2,500 mg/kg

Benzyl Alcohol: LD50, rat: 1,230 - 3,100 mg/kg

**INHALATION LC<sub>50</sub>:** No data is available on the product itself.

**Notes:** Components:

Benzyl Alcohol: LD50, rat (4 hours): >4.178 mg/L

**GERM CELL MUTAGENICITY:** No Data Available

**REPRODUCTIVE TOXICITY:** No Data Available

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No data available. Contact Env. Dept.

**AQUATIC TOXICITY (ACUTE):** No data is available on the product itself.

**Notes:** Components:

Benzyl Alcohol, bluegill sunfish (96 hour): LC50: 10 mg/L

Benzyl Alcohol, fathead minnow (96 hour): LC50: 460 mg/L

Benzyl Alcohol, silverside minnow (96 hour): LC50: 10 - 32 mg/L

Benzyl Alcohol, water flea (48 hour): LC50: 360 mg/L

Nonylphenol, fathead minnow (96 hour): LC50: 0.128 mg/L

Nonylphenol, daphnia (96 hour): LC50: 0.19 mg/L

Phenol, daphnia (48 hour): LC50: 6.6.mg/L

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Material should be disposed of as hazardous waste in accordance with Federal, state and local environmental regulations. Dispose of containers with any amount of liquid material as hazardous waste. Part B mixed containers can be considered as non-hazardous provided all residual material is cured solid. Part A and part D containers can be washed out with a small amount of laquer thinner. The residual material should be collected in one large container and disposed of as hazardous waste. The waste material can also be mixed with an epoxy resin and cured to a solid state for disposal as non-hazardous waste. Consult Sauereisen for the appropriate amount of epoxy resin to add to a known amount of part A (epoxy resin hardener).

**EMPTY CONTAINER:** Disposal must be made according to official regulations.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Triethylenetetramine

**PRIMARY HAZARD CLASS/DIVISION:** 8

**UN/NA NUMBER:** UN2259

**PACKING GROUP:** II

**LABEL:** Corrosive

**ROAD AND RAIL (ADR/RID)**

**PROPER SHIPPING NAME:** Triethylenetetramine

**UN NUMBER:** UN2259

**HAZARD CLASS:** 8

**PACKING GROUP:** II

**LABEL:** Corrosive.

**AIR (ICAO/IATA)**

**SHIPPING NAME:** Triethylenetetramine

**UN/NA NUMBER:** UN2259

**PRIMARY HAZARD CLASS/DIVISION:** 8

**PACKING GROUP:** II

**VESSEL (IMO/IMDG)**

**SHIPPING NAME:** Triethylenetetramine

**UN/NA NUMBER:** UN2259

**PRIMARY HAZARD CLASS/DIVISION:** 8

**PACKING GROUP:** II

**LABEL:** Corrosive

**CANADA TRANSPORT OF DANGEROUS GOODS**

**SHIPPING NAME:** Triethylenetetramine

**UN/NA NUMBER:** UN2259

**PRIMARY HAZARD CLASS/DIVISION:** 8

**PACKING GROUP:** II

**LABEL:** Corrosive

**15. REGULATORY INFORMATION**

**UNITED STATES**

**DOT LABEL SYMBOL AND HAZARD CLASSIFICATION**



Corrosive

R36/37/38: Irritating to eyes, respiratory system and skin.

S24/25: Avoid contact with skin and eyes.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** Acute. Chronic. Irritant. Toxic.

**313 REPORTABLE INGREDIENTS:** There are no listed chemicals above detection limits in this compound.

**TITLE III NOTES:** None above detection limits.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
3,6-diazaoctanethylenediamine	112-24-3
Diethylmethylbenzenediamine	68479-98-1
Benzyl Alcohol	100-51-6

**TSCA STATUS:** Components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

**CALIFORNIA PROPOSITION 65:** Known to the State of California to cause cancer or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Act of 1986".

It has not been determined and cannot be ascertained that this product would not expose users to the listed chemicals at the very low level prescribed in the regulations. Therefore, it is the user's responsibility to determine if the percent of the hazardous / carcinogenic ingredients listed elsewhere in the SDS comply with State of California regulations.

## CANADA

### WHMIS HAZARD SYMBOL AND CLASSIFICATION



Toxic



Corrosive

R36/37/38: Irritating to eyes, respiratory system and skin.

S24/25: Avoid contact with skin and eyes.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

**WHMIS CLASS:** Class D, Division 2, Subdivision B: Materials cause other toxic effects, toxic material.  
Class E, Corrosive.

**DOMESTIC SUBSTANCE LIST (INVENTORY):** Data not available.

## 16. OTHER INFORMATION

**PREPARED BY:** John A Kozak      **Date Revised:** 06/17/2020

**REVISION SUMMARY:** This SDS replaces the 05/07/2015 SDS.

### HMIS RATING

HEALTH	<input type="checkbox"/>	3
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	H