

This Safety Data Sheet has been prepared to comply with the EU Regulation No. 1907/2006 and 2015/830.

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION  
AND THE COMPANY/UNDERTAKING**

**1.1 Product Identifier:**

**Trade Name:**  
**Part Number:**  
**SDS Date of Preparation:** May 17, 2016

**1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:**

**Product Use:** Epoxy Hardener. This product is part of a two part product. Read and understand the hazard information on the SDS for the 5 Minute Quick Set Epoxy Resin before using this product.  
**Uses Advised Against:** None known.

**1.3 Details of the Supplier of the Safety Data Sheet:**

**Manufacturer:** Pacer Technology  
3281 E. Guasti Rd., Suite 260  
Ontario, CA 91761  
**Information Phone Number:** (909) 987-0550  
**E-mail:** [info@pacertechnology.com](mailto:info@pacertechnology.com)

**1.4 Emergency Telephone Number:**

**Emergency Spill Information:** CHEMTREC Domestic North America: (800) 424-9300  
CHEMTREC International: (703) 527-3887

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the Substance or Mixture:**

**GHS/CLP Regulation (EC) No 1272/2008:**

Physical	Health	Environment
Not Classified	Acute Toxicity Category 4 (H302) Eye Damage Category 1 (H318) Skin Corrosion Category 1B (H314) Skin Sensitizer Category 1B (H317) Reproductive Toxicity Category 2 (H361)	Aquatic Acute Toxicity Category 1 (H400) Aquatic Chronic Toxicity Category 1 (H410)

**2.2 Label Elements:**

Danger!



Contains: 2, 4, 6-Tris (dimethylaminomethyl) phenol, 2-Ethylhexanoic Acid

**Hazard Phrases**

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H361	Suspected of damaging fertility or the unborn child.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Phrases

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
P303 + P361 + P353 + P310	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor.
P301 + P330 + P331+ P310	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
P405	Store locked up.
P501	Dispose of contents and container in accordance with local and national regulations.

**2.3 Other Hazards:** None known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2 Mixture:**

Chemical Name	CAS#	EINECS#	CLP Annex VI Classification	%
2, 4, 6-Tris (dimethylaminomethyl) phenol	90-72-2	202-013-9	Acute Tox. Cat 4 (H302), Eye Dam. Cat 1 (H318), Skin Corr. Cat 1C (H314), Skin Sens. Cat 1B (H317)	20-30
4-Nonylphenol, branched	84852-15-3	284-325-5	Acute Tox. Cat 4 (H302), Eye Dam. Cat 1 (H318), Skin Corr. Cat 1B (H314), Repr. Cat 2 (H361), Aquatic Acute Cat 1 (H400), Aquatic Chronic Cat 1 (H410) (M-Factor Acute: 10, M-Factor Chronic:10)	<10
Curing Agent	Proprietary	Proprietary	Eye Irrit. Cat 2 (H319), Skin Irrit. Cat 2 (H315)	
2-Ethylhexanoic Acid	149-57-5	205-743-6	Repr. Cat 2 (H361d)	<5
m-Phenylenebis(methylamine)	1477-55-0	216-032-5	Acute Tox. Cat 4 (H302, H332), Eye Dam. Cat 1 (H318), Skin Corr. Cat 1B (H314), Skin Sens. Cat 1B (H317), Aquatic Chronic Cat 3 (H412), EUH071	<5

See Section 16 for further information on GHS Classification.

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of First Aid Measures:**

**Eye:** Immediately flush thoroughly with water for 20 minutes, while holding the eye lids open to be sure the material is washed out. Remove contact lenses if present and easy to do. Get immediate medical attention.

**Skin:** Immediately flush skin with plenty of water for 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Launder clothing before re-use. (Discard contaminated shoes).

**Inhalation:** Immediately remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

**Ingestion:** Do NOT induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Keep the victim calm and warm. Get immediate medical attention.

**4.2 Most Important symptoms and effects, both acute and delayed:** Causes severe eye and skin irritation and burns. May cause skin sensitization. Inhalation of vapors will cause severe respiratory tract irritation with possible burns. May be fatal if

swallowed. Swallowing may cause severe irritation and burns to the mouth, throat, and gastrointestinal tract. This product contains 2-Ethylhexanoic Acid and 4-Nonylphenol, branched which are suspected of causing reproductive harm.

**4.3 Indication of any immediate medical attention and special treatment needed:** Immediate medical attention is required for all routes of exposure.

## SECTION 5: FIRE-FIGHTING MEASURES

**5.1 Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, or water spray when fighting fires involving this material. Do not use water jet, this will spread the fire.

**5.2 Special Hazards Arising from the Substance or Mixture:**

**Unusual Fire and Explosion Hazards:** None known.

**Combustion Products:** Oxides of carbon, nitrogen, sulfur, and hydrogen sulfide.

**5.3 Advice for Fire-Fighters:**

Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Contain water used in firefighting from entering sewers or natural waterways.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:**

Evacuate spill area and keep unprotected personnel away. Prevent contact with eyes, skin or clothing. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Do not breathe vapors. Ventilate area.

**6.2 Environmental Precautions:**

Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

**6.3 Methods and Material for Containment and Cleaning Up:**

Cover with an inert absorbent material and collect into an appropriate container for disposal.

**6.4 Reference to Other Sections:**

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for Safe Handling:** Do not breathe vapors. Use with adequate ventilation. Prevent contact with the eyes, skin and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash thoroughly after handling. Keep containers closed when not in use.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Store in a container in a cool, well-ventilated location away from incompatible materials. Keep container tightly closed when not in use. Keep in original container. Keep away from sunlight and sources of ignition. Keep container in ambient room temperature (21°C/ 70°F).

**7.3 Specific end use(s):** Consumer use.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control Parameters:**

Chemical Name	Exposure Limits
2, 4, 6-Tris (dimethylaminomethyl) phenol	None Established
4-Nonylphenol, branched	None Established
Curing Agent	None Established
2-Ethylhexanoic Acid	5 mg/m <sup>3</sup> TWA Belgium OEL
m-Phenylenebis(methylamine)	0.1 mg/m <sup>3</sup> STEL Belgium OEL

## 8.2 Exposure Controls:

**Ventilation:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

### Personal Protective Equipment:

**Respiratory Protection:** In operations where the occupational exposure limits are exceeded, an approved respirator with applicable cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** Impervious gloves are required for all operations where skin contact can occur. Contact your glove supplier for selection assistance. In Europe follow EN 374.

**Eye Protection:** Chemical safety goggles and face shield recommended. In Europe follow EN 166.

**Other Protective Equipment:** Impervious clothing is required to prevent skin contact and contamination of personal clothing. In Europe follow EN 13034. An eye wash facility and safety shower should be available in the work area.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic Physical and Chemical Properties:

<b>Appearance:</b> Pale yellow viscous liquid	<b>Vapor Density:</b> 1.1 g/cc @ 25°C (77°F)
<b>Odor:</b> Sulfur odor	<b>Solubility(ies):</b> Slightly soluble in water
<b>Odor Threshold:</b> No data available	<b>Partition Coefficient (Octanol/Water):</b> No data available
<b>pH:</b> No data available	<b>Auto-ignition Temperature:</b> No data available
<b>Melting Point/Freezing Point:</b> No data available	<b>Decomposition Temperature:</b> No data available
<b>Initial Boiling Point/Range:</b> No data available	<b>Viscosity:</b> 10000-18000 cps @ 25°C (77°F)
<b>Flash Point:</b> 110°C (230°F)	<b>Explosive Properties:</b> Not explosive
<b>Evaporation Rate:</b> No data available	<b>Oxidizing Properties:</b> Not an oxidizer
<b>Flammable Limits:</b> LEL: No data available UEL: No data available	<b>Relative Density:</b> 1.17
<b>Vapor Pressure:</b> No data available	<b>Flammability (solid, gas):</b> Not applicable

**9.2 Other Information:** None available

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** Not reactive.

**10.2 Chemical Stability:** Stable under normal storage and handling conditions.

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal storage and use.

**10.4 Conditions to Avoid:** Avoid high temperatures and freezing temperatures.

**10.5 Incompatible Materials:** Oxidizing agents, acids, alkalis, and amines.

**10.6 Hazardous Decomposition Products:** Combustion will produce oxides of carbon, nitrogen, sulfur, and hydrogen sulfide.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects:

#### Potential Health Effects:

**Eye:** Causes severe irritation and burns. Permanent eye injury is likely.

**Skin:** Causes severe skin irritation and burns. May cause allergic skin reaction (sensitization).

**Inhalation:** Inhalation of vapors may cause severe mucous membrane and respiratory irritation and burns.

**Ingestion:** Swallowing may cause severe irritation and burns to the mouth, throat, and gastrointestinal tract, abdominal pain, vomiting, diarrhea and collapse.

**Chronic Hazards:** Prolonged or repeated contact may cause allergic skin reaction (sensitization). Repeated exposure may cause permanent damage. Prolonged exposure to 2-Ethylhexanoic Acid may damage the unborn child based on animal

studies.

**Acute Toxicity Values:**

Product ATE: 1468 mg/kg (oral), 50 mg/L (inhalation)

2, 4, 6-Tris (Dimethylaminomethyl) Phenol: Oral rat LD50: 2169 mg/kg, Skin rat LD50: >1 mL/kg

4-Nonylphenol, branched: Oral rat LD50: 1412 mg/kg

Curing Agent: Oral rat LD50: 7500 mg/kg, Skin rat LD50: >2000 mg/kg

2-Ethylhexanoic Acid: Oral rat LD50: 2043 mg/kg, Skin rat LD50: >2000 mg/kg

m-Phenylenebis(methylamine): Oral rat LD50: 930 mg/kg, Inhalation rat LC50: 1.34 mg/L/4hr (as aerosol), Skin rat LD50: >3100 mg/kg

**Skin corrosion/irritation:** 2, 4, 6-Tris (Dimethylaminomethyl) Phenol: Found to be corrosive following a 4 hr semi-occluded exposure on rabbit skin. 2-Ethylhexanoic Acid: Slightly irritating on rabbit skin. 4-Nonylphenol, branched: In a primary dermal irritation study, this substance was found to be corrosive after a 60 minute exposure on rabbit skin. m-Phenylenebis(methylamine): Corrosive to rat skin.

**Eye damage/irritation:** 2, 4, 6-Tris (Dimethylaminomethyl) Phenol: Extremely irritating to rabbit eye and is expected to be corrosive. 2-Ethylhexanoic Acid: Not irritating to rabbit eyes. 4-Nonylphenol, branched: Corrosive to rabbit eyes.

**Respiratory Irritation:** No data available.

**Respiratory Sensitization:** No data available.

**Skin Sensitization:** 2, 4, 6-Tris (Dimethylaminomethyl) Phenol: Mild sensitization was seen in a Guinea pig maximization test. 2-Ethylhexanoic Acid: Not sensitizing in Guinea pig maximization test. 4-Nonylphenol, branched: Not sensitizing in guinea pig maximization test. m-Phenylenebis(methylamine): Sensitizing in Mouse Local Lymphnode assay (LLNA) and Guinea pig maximization test.

**Germ Cell Mutagenicity:** No data available.

**Carcinogenicity:** None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH and the EU CLP.

**Reproductive Toxicity:** 2-Ethylhexanoic Acid: Group of male and female rats received 0, 100, 300 or 600 mg/kg/day of 2-Ethylhexanoic acid (2-EHA) in their drinking water. Male rats were exposed for 10 weeks and females were exposed to 2 weeks before mating. A 9-12% decrease in body weight was observed from gestation day 7 onwards in females of the high-dose group, which disappeared during lactation. The results on the offspring showed that the average litter size was reduced by 16% at the high dose. Post-natal deaths tended to be more common in the 2-EHA treated groups but this was not statistically significant. The frequency of lethargy, hematomas, and abnormally thin hair was higher at the two highest dose levels. Kinky tail showed a dose-dependent increase, and the frequency of abnormal legs was higher in the 2-EHA-treated animals. Exposure to 2-EHA resulted in delayed physical development of the pups. Ears raised later in mid- and high-dose groups, and eye opening, eruption of teeth, and hair growth occurred significantly later at the high dose level. 4-Nonylphenol, branched: In a testicular toxicity study nonylphenol was administered by intraperitoneal injection to 10 male Swiss mice/dose at dose levels of 0, 21.25, and 42.50 mg/kg by weight/day for 35 consecutive days. Exposure to 42.5 mg/kg/d had effects on some reproductive organs weight and sperm characteristics (count and motility) but did not influence the mating behavior, male fertility or the developed fetuses. In a teratogenicity study, Nonylphenol was administered to Wistar Rats (112 pregnant rats and 2219 fetuses) by gavage at dose levels of 0, 75, 150, 300 mg/kg by weight/day from day 6-15 of gestation. At a dose level of 150 mg/kg only 3 of 21 females showed affected kidneys or spleens. A dose level of 300 mg/kg caused clear maternal toxic effects based on increased mortality, reduced body weight gain and food consumption. The embryo-fetal development a NOAEL of  $\geq 300$  mg/kg was found.

**Specific Target Organ Toxicity:**

Single Exposure: No data available

Repeat Exposure: No data available

**Aspiration Hazard:** Components are not aspiration hazards.

<b>SECTION 12: ECOLOGICAL INFORMATION</b>
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**12.1 Toxicity:**

2, 4, 6-Tris (Dimethylaminomethyl) Phenol: 96 hr LC50 Rainbow trout: 180-240 mg/L  
 4-Nonylphenol, branched: 96 hr LC50 Fathead minnow: 128 ug/L (0.128 mg/L), 96 hr LC50 Atlantic Sturgeon: 0.05 mg/L, 48 hr EC50 Daphnia magna: 84.4 ug/L (0.0844 mg/L) (M-Factor Acute: 10, M-Factor Chronic: 10)  
 2-Ethylhexanoic Acid: 96 hr LC50 Oryzias latipes: >100 mg/L, 96 hr LC50 Rainbow trout: 180 mg/L  
 m-Phenylenebis(methylamine): 96 hr LC50 Oryzias latipes: 87.6 mg/L, 48 hr EC50 Daphnia magna: 15.2 mg/L

**12.2 Persistence and Degradability:** No data available

**12.3 Bioaccumulative Potential:** No data available

**12.4 Mobility in Soil:** No data available

**12.5 Results of PBT and vPvB Assessment:** Components do not meet the criteria.

**12.6 Other Adverse Effects:** Not applicable

<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>
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**13.1 Waste Treatment Methods:**

Dispose in accordance with all local, state and federal regulations.

<b>SECTION 14: TRANSPORTATION INFORMATION</b>
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	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
<b>EU ADR/RID</b>	UN1760	Corrosive liquid, n.o.s. (2, 4, 6-Tris (dimethylaminomethyl) phenol)	8	III	Not applicable
<b>IMDG</b>	UN1760	Corrosive liquid, n.o.s. (2, 4, 6-Tris (dimethylaminomethyl) phenol)	8	III	Not applicable
<b>IATA/ICAO</b>	UN1760	Corrosive liquid, n.o.s. (2, 4, 6-Tris (dimethylaminomethyl) phenol)	8	III	Not applicable

**14.6 Special Precautions for User:** Not applicable

**14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

<b>SECTION 15: REGULATORY INFORMATION</b>
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**15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:**

**EUROPEAN REGULATIONS**

**REACH:** These products comply with REACH regulation as applicable. For more information, contact Pacer Technology.

**SVHC:** This product contains the following Substances of Very High Concern (SVHCs): 4-Nonylphenol, branched (<10%)

**15.2 Chemical Safety Assessment:** No data available

<b>SECTION 16: OTHER INFORMATION</b>
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**Date of Current Revision:** May 17, 2016

**Revision Summary:** New SDS

**Date of Previous Revision:** None

**GHS Classification for Reference (See Sections 3):**

Acute Tox. Cat 4 Acute Toxicity Category 4  
Aquatic Acute Cat 1 Aquatic Acute Toxicity Category 1  
Aquatic Chronic Cat 1 Aquatic Chronic Toxicity Category 1  
Aquatic Chronic Cat 3 Aquatic Chronic Toxicity Category 3  
Eye Dam. Cat 1 Eye Damage Category 1  
Repr. Cat 2 Reproductive Toxicity Category 2  
Skin Corr. Cat 1 Skin Corrosion Category 1  
Skin Sens. Cat 1B Skin Sensitizer Category 1B  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H332 Harmful if inhaled.  
H361 Suspected of damaging fertility or the unborn child.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
EUH071 Corrosive to the respiratory tract.

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This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Pacer Technology shall not be held liable for any damage resulting from handling or from contact with the above product.