

# SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Quantum45 Clear Epoxy Sealer Base Product Code: 45-ES-CLEAR

Trade Name:

**MANUFACTURER:**  
Engineered Marine Coatings, INC

**EMERGENCY PHONE:** 1-800-255-3924 (CHEMTEL)

**MANUFACTURING ADDRESS:**  
4120 Hyde Park Blvd.  
Niagara Falls, NY 14305

**INFORMATION PHONE:** 1-855-54GENIUS

**CORPORATE ADDRESS:**  
PO Box 921  
Isle of Palms, SC 29451

Product Use:  
Not recommended for:

## 2. HAZARD(S) IDENTIFICATION

### GHS Ratings:

Flammable liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Oral Toxicity	Acute Tox. 4	Oral $>300$ and $\leq 2000$ mg/kg
Dermal Toxicity	Acute Tox. 3	Dermal $>200$ and $\leq 1000$ mg/kg
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3$ < 4.0 or persistent inflammation
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity $\geq 3$ , Iritis $> 1.5$
Skin sensitizer	1	Skin sensitizer
Reproductive toxin	2	Human or animal evidence possibly with other information

### GHS Hazards

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H361	Suspected of damaging fertility or the unborn child

### GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/.../equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash hands thoroughly after handling

P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER or doctor/physician
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P321	Specific treatment (see ... on this label)
P322	Specific measures (see ... on this label)
P330	Rinse mouth
P361	Remove/Take off immediately all contaminated clothing
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P370+P378	In case of fire: Use ... for extinction.
P405	Store locked up
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to ...

Signal Word: **Danger**



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight Concentration %
Xylene	1330-20-7	30.00% - 40.00%
Ethylene glycol monobutyl ether	111-76-2	20.00% - 30.00%
Ethylbenzene	100-41-4	5.00% - 10.00%
Tris - 2,4,6-(dimethylaminomethyl)phenol	90-72-2	1.00% - 5.00%
Amine	-----	1.00% - 5.00%
Methylenebiscyclohexanamine, 4, 4	1761-71-3	1.00% - 5.00%

### 4. FIRST AID MEASURES

#### INHALATION:

Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention. Asthmatic-type systems may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. Consult a physician.

#### EYES:

Flush with clean, lukewarm water (low pressure) for at least 15 minutes, while lifting eyelids. Refer individual to physician or ophthalmologist for immediate follow-up.

**SKIN:**

First aid for skin: Remove contaminated clothing immediately. Wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse. For severe exposures, get under safety shower after removing clothing, then get medical attention. Seek medical attention if irritation develops or persists.

**INGESTION:**

DO NOT INDUCE VOMITING. Give 1 to 2 cups of mil or water to drink. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON. Consult physician immediately.

**5. FIRE-FIGHTING MEASURES**

Flash Point: 25 C (77 F)

LEL: 1.00

UEL: 13.00

**EXTINGUISHING MEDIA:** Use water spray to cool fire exposed surfaces and to protect personnel. Isolate "fuel" supply from fire. Use foam, dry chemical, carbon dioxide, or water spray as last option. Avoid spraying water directly into storage containers due to the danger of boilover.

**HAZARDOUS COMBUSTION PRODUCTS:** Fires involving this product may release fumes, smoke, carbon dioxide, carbon monoxide, and irritating vapors.

**FIRE FIGHTING INSTRUCTIONS:** Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting fire. Vapors may cause a flash fire or ignite explosively. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

**6. ACCIDENTAL RELEASE MEASURES**

**SMALL SPILL:**

Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

**LARGE SPILL:**

Evacuate all non-essential personnel. Remove all sources of ignition. Ventilate the area. Equip employees with appropriate protection equipment. Dike around spilled material. Cover spill with inert absorbent material and shovel with non-sparking tools into container. Remove containers to a safe area and seal. Waste material must be disposed of in accordance with federal, state, and local environmental regulatory controls.

**7. HANDLING AND STORAGE**

**HANDLING:** Ground lines and equipment during transfer to reduce the possibility of static spark-initiated fire or explosion. Use non-sparking tools. Do not cut, grind, drill, weld, or reuse containers unless adequate precautions are taken against these hazards. Do not eat, drink, or smoke in areas of use or storage.

**STORAGE:** Protect against physical damage. Store in a cool dry place. Outside or detached storage preferred. Inside storage should be in a standard flammable liquid storage room or cabinet. All equipment should be grounded and bonded to reduce static electricity hazard. Use non-sparking tools. Do not reuse empty product container for any purpose.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Xylene 1330-20-7	PEL 100 ppm - TWA STEL 150 ppm (655 mg/m <sup>3</sup> ) TWA 100 ppm (435 mg/m <sup>3</sup> ) USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000	100 ppm - TWA 150 ppm - STEL	Not Established
Ethylene glycol monobutyl ether 111-76-2	The Federal OSHA standard 50 ppm (240 mg/m <sup>3</sup> ) TWA averaged over an 8-hour workshift.	The ACGIH limit is 25 ppm (121 mg/m <sup>3</sup> )TWA averaged over an 8-hour workshift.	Not Established
Ethylbenzene 100-41-4	100 ppm TWA 125 ppm STE	100 ppm TWA 125 ppm STEL	The NIOSH IDLH level is 800 ppm of 0.02 mg/m <sup>3</sup> on either a momentary or a daily average basis.
Tris - 2,4,6- (dimethylaminomethyl)phenol 90-72-2	TWA 400 ppm 980 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 STEL 500 ppm 1,225 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000	TWA 200 ppm USA. ACGIH Threshold Limit Values (TLV) STEL 400 ppm USA. ACGIH Threshold Limit Values (TLV)	Not Established
Amine -----	OSHA PEL Not Available	ACGIH TLV Not Available	Not Established
Methylenebis(cyclohexanamine), 4, 4 1761-71-3	OSHA PEL Not Available	ACGIH TLV Not Available	Not Established

Good general ventilation (typically 10 air changes per hour) should be used to keep vapor levels below the limits in Section 2 and lower explosive limit in Section 5. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking, or using the toilet. Promptly remove clothing that becomes contaminated.

ENGINEERED MARINE COATINGS

## 9. PHYSICAL AND CHEMICAL PROPERTIES

This mixture typically exhibits the following properties under normal circumstances:

<b>Appearance</b> Viscous Liquid  <b>Physical State</b> Liquid  <b>Specific Gravity (SG)</b> 0.89	<b>Odor</b> Characteristic of solvents listed in Section 2  <b>Boiling Range</b> 130 to 330 °C  <b>Coating VOC (g/L)</b> 706.55
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## 10. REACTIVITY AND STABILITY

STABLE

**Incompatibility:**

Strong oxidizing agents  
Strong Acids

**Hazardous Decomposition:**

May form: carbon dioxide and carbon monoxide  
Hazardous polymerization will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Mixture Toxicity**

Oral Toxicity LD50: 1,329mg/kg  
Dermal Toxicity LD50: 684mg/kg  
Inhalation Toxicity LC50: 416mg/L

**Component Toxicity**

1330-20-7	Xylene Oral LD50: 4,300 mg/kg (RAT) Dermal LD50: 1,700 mg/kg (RABBIT) Inhalation LC50: 5,000 ppm (RAT)
111-76-2	Ethylene glycol monobutyl ether Oral LD50: 470 mg/kg (RAT) Dermal LD50: 220 mg/kg (RAT) Inhalation LC50: 450 ppm (RAT)
1761-71-3	Methylenebiscyclohexanamine, 4, 4 Oral LD50: 380 mg/kg (RAT) Dermal LD50: 1,000 mg/kg (RABBIT)

**ROUTES OF ENTRY:**

Inhalation      Skin Contact      Eye Contact      Ingestion

Exposure to this material may affect the following organs:

Blood    Eyes      Kidneys      Liver      Lungs      Central Nervous System      Skin

**Effects of Overexposure**

Short Term Exposure

Ethyl benzene irritates the eyes, skin, and respiratory tract. Exposure to high concentrations can cause dizziness, lightheadedness and unconsciousness. Very high exposures (above the OEL) can cause difficult breathing, narcosis, coma, and even death. Swallowing the liquid may cause aspiration into the lungs, resulting in chemical pneumonitis. May affect the central nervous system. Concentration of 200 ppm can cause irritation. This chemical irritates the eyes, skin, and respiratory tract. High exposure caused dizziness, lightheadedness, and unconsciousness. breath. Higher exposures can cause pulmonary edema, a medical emergency that can be delayed for several hours. This can cause death. Exposure could cause central nervous system depression and liver and kidney damage

Long Term Exposure

Repeated or prolonged exposure to the skin may cause drying, scaling and blistering. May cause kidney disease, liver disease, chronic respiratory disease, skin disease, as follows: EB is not nephrotoxic. Concern is expressed because the kidney is the primary route of excretion of EB and its metabolites. EB is not hepatotoxic. Since EB is metabolized by the liver, concern is expressed for these tissues. Exacerbation of pulmonary pathology might occur following exposure to EB. Individuals with impaired pulmonary function might be at risk. EB is a defatting agent and may cause dermatitis following prolonged exposure. Individuals with preexisting skin problems may be more sensitive to EB. There is limited evidence that EB may damage the developing fetus, and may cause mutations. The liquid defats the skin. This chemical can break down red blood cells, and cause anemia; effects the haematopoietic system, resulting in blood disorders. It can also damage the liver and kidneys.

The following ingredients are listed as possible carcinogens:

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
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**12. ECOLOGICAL INFORMATION**

This section will be updated as ecological reviews are complete.

**Component Ecotoxicity**

Ethylene glycol monobutyl ether	Toxicity to fish LC50 - other fish - 220 mg/l - 96 h
	Toxicity to daphnia and other aquatic invertebrates
	EC50 - Daphnia magna (Water flea) - 1,815 mg/l - 24 h
	Persistence and degradability
	no data available
	Ratio BOD/ThBOD 88 %
	Bioaccumulative potential
	no data available
	Mobility in soil
	no data available
	Results of PBT and vPvB assessment
	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
	Other adverse effects
	no data available

**13. DISPOSAL CONSIDERATIONS**

Waste material must be disposed of in accordance with all federal, state, and local environmental regulatory controls. Chemical additions, processing, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate.

**14. TRANSPORT**

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	PAINT	1263	III	3

**15. REGULATORY INFORMATION**

The regulatory information provided is not meant to be comprehensive. Other federal, state, and local regulation applies to this material.

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
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**EU Risk Phrases****Safety Phrase**

- None

**16. OTHER INFORMATION**

**Hazardous Material Information System (HMIS)**

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	1
PERSONAL PROTECTION	G

**HMIS & NFPA Hazard Rating Legend**  
\* = Chronic Health Hazard  
0 = INSIGNIFICANT  
1 = SLIGHT  
2 = MODERATE  
3 = HIGH

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Reviewer Revision

2

