

Safety Data Sheet

Section 1. Identification

GHS product Identifier : CR™ Sealant- Part A
Other means of identification : Not available

Relevant identified used of the substance or mixtures and uses advised against

CR™ Sealant (Chemical Resistant Sealant) is a 100% solids, two-component, moisture tolerant, penetrating epoxy primer which is specifically formulated to provide excellent adhesion with the Polyguard Chemical Resistant Waterproofing Membranes. CR™ Sealant is an integral part of the Polyguard Chemical Resistant Waterproofing System and will be an amber color in appearance.

Supplier's details Polyguard Products, Inc.
3801 South Interstate 45
Ennis, TX 75119
Tel: (800) 541-4994

**Emergency telephone number
with hours of operation** CHEMTREC, US 1-800-424-9300 International 1-703-527-3887
(24/7)

Section 2. Hazards Identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazardous Communications Standard (49CFR1910.1200) .

**Classification of the substance
or mixture** Acute Toxicity, dermal- Category 4
Acute Toxicity, inhalation- Category 4
Skin corrosion/irritation- Category 2
Serious eye damage/eye irritation.- Category 2
Sensitization, skin- Category 1
Hazardous to the aquatic environment, acute hazard- Category 3
Hazardous to the aquatic environment, long term hazard- Category 2
Not classified

OSHA defined hazards
GHS label elements
Hazard pictogram



Signal word Warning
Hazard statement

Harmful in contact with skin. Causes skin irritation. May cause allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. Harmful to aquatic life. Toxic to aquatic life with long lasting effects

Precautionary statements
Prevention

Avoid breathing mist or vapors. Wash thoroughly after handling. Use only outdoors or in a well ventilated area. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/clothing.

Response

If on Skin: wash with plenty of water. If Inhaled: Remove person to fresh air and keep comfortable for breathing. If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

Section 2. Hazards Identification

Storage	Store away from incompatible materials.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	None known
Supplemental Information	33.49 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. 98.44 % of the mixture consists of component(s) of unknown acute oral toxicity. 98.44% of the mixture consists of component(s) of unknown acute inhalation toxicity. 95.94 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 98.44 % of the mixture consists of component(s) of unknown acute dermal toxicity.

Section 3. Composition/Information on Ingredients

Substance/Mixture	Mixture
Other means of identification	Not available
CAS number/other identifiers	
CAS number	Not applicable
Product code	Not applicable

Ingredient name	%	CAS Number
Epoxy resin-reaction Product of Bisphenol A and Epichlorohydrin (refer to Epichlorohydrin)	30-60	25068-38-6
1-Chloro-4-(Trimethyl) benzene	1 to < 3	98-56-6
Other components below reportable limits	30-60	

* The exact percentage (concentration) of composition has been withheld as a trade secret. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentration applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of necessary first aid measures.

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical advice/ attention if you feel unwell. In case of eczema or other skin disorders: seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Ingestion	Call a poison center or doctor if you feel unwell. Rinse mouth.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Section 4. First Aid Measures

Indication of immediate medical attention and special treatment needed, if necessary.

Notes to physician:	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. In cases of shortness of breath, give oxygen. Symptoms may be delayed. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media

Water fog, foam, dry chemical powder, or Carbon Dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed..

Hazardous thermal decomposition products

During fire, gases hazardous to health may be formed

Special protective equipment

Water runoff can cause environmental damage.

Special protective actions for fire fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in a positive pressure mode.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures.

For non emergency personal

Keep unnecessary personnel away. Keep people away from and upwind of a spill or leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers of spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilate Fully encapsulating vapor protective clothing should be worn for spills and leaks with no fire. For personal protection, see section 8 of the SDS.

For emergency responders

Enviromental precautions

Avoid release to the enviroment. Contact local authorities in cases of spillage to drain /aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up

Spill

Large spills- Stop leak if without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand, or earth and place in containers. After product recovery flush area with water. Small spills: wipe up with absorbent material and clean surface thoroughly to remove residual contamination. Dispose in accordance with local, state, tribal and Federal regulations Dispose of via a licensed waste disposal contractor. See Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions for safe handling

Protective measures

Do not taste or swallow. Avoid breathing vapor. Avoid contact with skin. Avoid contact with eyes. Avoid contact with clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personnel protective equipment (see section 8). Observe good industrial hygiene practices. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry cool and well-ventilated area and food and drink. Store locked up. Keep container tightly closed and sealed until ready to use. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

Biological limit values

Appropriate engineering controls

No biological exposure limits noted for ingredient(s)

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Hygiene measure:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the work station location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when risk assessment indicates this is necessary to avoid exposure to liquid splashes. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Face shield is recommended. Wear safety glasses with side shields or chemical splash goggles.

Skin Protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a properly fitted, air purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and Chemical Properties

Appearance

Physical state	Liquid
Color	Amber
Odor	Slight
Odor threshold	Not available
pH	Not available
Melting point	Not available
Boiling point	Not available
Flash Point	>350 °F (176.6 ° C) Pensky- Martens Closed Cup
Evaporation rate:	Not available
Flammability(solid, gas)	Not available
Lower & upper explosive (flammable) limits	Lower : Not available Upper : Not available
Vapor density	Not available
Vapor pressure	Not available
Relative density	9.36 lbs/gal
Specific Gravity	1.14 estimated
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto- ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Flammability class	Combustible III B
VOC	< 25 g/l Mixed components

Section 10. Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	This product is stable.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid:	Avoid with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

Section 11.Toxicological Information

Information on likely routes of exposure

Eye contact	Causes serious eye irritation.
Inhalation	Harmful if inhaled
Skin contact	Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Ingestion	Expect to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Section 11. Toxicological Information

Information on toxicological effects

<u>Acute toxicity</u>	Harmful if inhaled. Harmful in contact with skin.
<u>Skin corrosion/irritation</u>	Causes skin irritation.
<u>Serious eye damage/eye irritation</u>	Causes serious eye irritation.
<u>Respiratory or skin sensitization</u>	
<u>Respiratory sensitization</u>	Not a respiratory sensitizer.
<u>Skin sensitization</u>	May cause an allergic skin reaction.
<u>Germ Cell mutagenicity</u>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<u>Carcinogenicity</u>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<u>Reproductive toxicity</u>	This product is not expected to cause reproductive or developmental effects.
<u>Specific target organ toxicity (single exposure)</u>	Not classified.
<u>Specific target organ toxicity (repeated exposure)</u>	Not classified.
<u>Aspiration hazard</u>	Not an aspiration hazard.
<u>Chronic effects</u>	Prolonged inhalation may be harmful.



Section 12. Ecological Information

<u>Ecotoxicity</u>	Toxic to aquatic life with long lasting effects.
<u>Persistence and degradability</u>	No data is available on the degradability of this product.
<u>Bio accumulative potential</u>	
<u>Mobility in soil</u>	No data is available on this product.
<u>Other adverse effects</u>	The product contains volatile organic compounds which have a photochemical ozone creative potential.

Section 13. Disposal Considerations

<u>Disposal methods</u>	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recycled products via a licensed waste disposal contractor. Waste should not be disposed of to a sewer. 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 empty 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, water ways, drains and sewers.
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Section 14. Transportation Information

	DOT Classification	IMDG	IATA
UN Number	Not regulated	UN 3082	UN 3082
UN Proper Shipping Name		Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A/Epichlorohydrin resin, Oxirane, Mono[(c12-14-alkyloxy)methyl] Derivatives [alkyl(c12-14) Glycidyl Ether]) (Epoxy Resin, BYK 310)	Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A/Epichlorohydrin resin, Oxirane, Mono[(c12-14-alkyloxy)methyl] Derivatives [alkyl(c12-14) Glycidyl Ether]))
Transportation hazard class(es)		9 	9 
Packing Group		III	III
Environmental Hazard		No	No
Additional Information		Emergency schedules (EmS) F-A, S-F	

Section 15. Regulatory Information

U.S. Federal regulations:	United States TSCA section 12(b) Export notification- (40 CFR 707, subpt. D) 1-Chloro-4-(Trimethyl) benzene (CAS # 98-56-6) 1% one-time Export notification only.
CERCLA Hazardous Substance list	Not listed
SARA 304 Emergency release notification	Not listed
SARA 302 Extremely hazardous substance	Not listed
SARA 311/312	Acute hazard
SARA 313	Not regulated
Clean Air Act (CAA) section 112 Hazardous Air Pollutants (HAPs) list	Not listed
Clean Air Act (CAA) section 112 (r) Accidental Release Prevention.	Not listed
Safe Drinking Water Act (SDWA)	Not regulated

15. Regulatory Information

State regulations
California Prop 65

Warning this product contains a chemical known to the State of California to cause cancer. Ethyl Benzene

16. Other Information

Date of revision:	3/18/19
Date of previous issue	12/4/15
Revisions:	<p>Section 2: Add statement “Hazardous to the aquatic environment, acute hazard, category 3”. Add OSHA defined hazards “ not classified”. Add GHS symbol for marine pollutant. Under hazard statement- add “Harmful to aquatic life”. Add supplement information.</p> <p>Section 3: Remove Oxirane, Mono [(c12-14-alkyloxy)methyl] derivatives [alkyl(c12-14) Glycidyl Ether] – CAS # 68609-97-2 from chemical list and add 1-Chloro-4- (Trimethyl) benzene CAS # 98-56-6.</p> <p>Section 4: Update first aid procedures.</p> <p>Section 5 Update information under Specific hazards arising from the chemical.</p> <p>Section 8 Change eye/face PPE to include face shield.</p> <p>Section 9 Add value for VOC and specific gravity.</p> <p>Section 10 Update information under conditions to avoid.</p> <p>Section 11 Update toxicological exposure information.</p> <p>Section 12 Update other adverse effects statement to say “ product contains volatile organic compounds which have photochemical ozone creation potential”</p> <p>Section 14 Update proper shipping name under IATA and IMDG regulations.</p> <p>Section 15 Update TSCA export notice information. Add SARA 304 information.</p> <p>Section 16. Remove reference to HMIS system.</p>
Version	2
Prepared by	C. Rogalski

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Safety Data Sheet

Section 1. Identification

GHS product Identifier : CR™ Sealant- Part B
Other means of identification : Not available

Relevant identified used of the substance or mixtures and uses advised against

CR™ Sealant (Chemical Resistant Sealant) is a 100% solids, two-component, moisture tolerant, penetrating epoxy primer which is specifically formulated to provide excellent adhesion with the Polyguard Chemical Resistant Waterproofing Membranes. CR™ Sealant is an integral part of the Polyguard Chemical Resistant Waterproofing System and will be an amber color in appearance.

Supplier's details Polyguard Products, Inc.
3801 South Interstate 45
Ennis, TX 75119
Tel: (800) 541-4994
Emergency telephone number CHEMTREC, US 1-800-424-9300 International 1-703-527-3887
with hours of operation (24/7)

Section 2. Hazards Identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazardous Communications Standard (49CFR1910.1200) .
Classification of the substance or mixture Acute Toxicity, oral- Category 4
Acute Toxicity, dermal- Category 4
Acute Toxicity, inhalation- Category 4
Skin corrosion/irritation- Category 1
Serious eye damage/eye irritation- Category 1
Sensitization, skin- Category 1
Hazardous to the aquatic environment, acute hazard- Category 3
Hazardous to the aquatic environment, long term hazard- Category 3

GHS label elements Hazard pictogram



Signal word Hazard statement

Danger
Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause allergic skin reaction. Causes serious eye damage.
Harmful if inhaled. Harmful to aquatic life. Harmful to aquatic life with long lasting effects

Precautionary statements Prevention

Do not breathing mist or vapors. Wash thoroughly after handling. Do not eat, smoke or drink when using this product. Use only outdoors or in a well ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves & protective clothing. Wear eye and face protection. Avoid release to the environment.

Section 2. Hazards Identification

Response	If swallowed: rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation or rash occurs. Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage	Store locked up.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	Not classified
Supplemental information	78.25 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. 76.06% of the mixture consists of component(s) of unknown acute oralk toxicity. 77.66 % of th emixture consists of component(s) of unknown acute hazards to the aquatic environment.

Section 3. Composition/Information on Ingredients

Substance/Mixture	: Mixture
Other means of identification	: Not available
CAS number/other identifiers	
CAS number	: Not applicable
Product code	: Not applicable

Ingredient name	%	CAS Number
Benzyl Alcohol	5-10	100-51-6
1-(2-aminoethyl)piperazine	1-5	140-31-8
Diethylenetriamine	1-5	111-40-0
Ethylenediamine	1-5	107-15-3
Isophoronediamine	1-5	2855-13-2
Phenol	1-5	108-95-2
Other components below reportable limits	60-100	

* The exact percentage (concentration) of composition has been withheld as a trade secret. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentration applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of necessary first aid measures.

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call as poison center or doctor/physician if you feel unwell if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Chemical burns must be treated by a physician. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Section 4. First Aid Measures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness could occur.

Indication of immediate medical attention and special treatment needed, if necessary.

Notes to physician:	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
Specific treatments	No specific treatment
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-Fighting Measures

<u>Extinguishing media</u>	
Suitable extinguishing media	Water fog, foam, dry chemical powder, or Carbon Dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special protective actions for fire fighters	Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures.

For non emergency personal	Keep unnecessary personnel away. Keep people away from and upwind of a spill or leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers of spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
For emergency responders	Fully encapsulating vapor protective clothing should be worn for spills and leaks with no fire. For personal protection, see section 8 of the SDS.
Enviromental precautions	Prevent entry into waterways, sewer, basements or confined areas.

Section 6. Accidental Release Measures

Methods and materials for containment and cleaning up

Spill

Large spills- Stop leak if without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand, or earth and place in containers. After product recovery flush area with water.

Small spills: wipe up with absorbent material and clean surface thoroughly to remove residual contamination. Dispose in accordance with local, state, tribal and Federal regulations Dispose of via a licensed waste disposal contractor. See Section 13 for waste disposal.

Section 7. Handling and Storage

Protective measures

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using , do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personnel protective equipment (see section 8). Observe good industrial hygiene practices. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of SDS).

Section 8. Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

<u>Ingredient name</u>	<u>Exposure limits</u>
Diethylenetriamine	ACGIH TLV- TWA 1 ppm NIOSH REL- TWA 4 mg/m ³
Ethylenediamine	OSHA PEL- 25 mg/m ³ ACGIH TLV- TWA 10 ppm NIOSH REL- TWA 25 mg/m ³
Phenol	OSHA PEL- 19 mg/m ³ ACGIH TLV- TWA 5 ppm NIOSH REL- TWA 19 mg/m ³ NIOSH REL- Ceiling 60 mg/m ³

U.S. Workplace Environmental Exposure Level (WEEL) guidelines

<u>Components</u>	<u>Type</u>	<u>Value</u>
Benzyl Alcohol (CAS 100-51-6)	TWA	44.2 mg/m ³

Biological limit values

ACGIH Biological Exposure Indices

<u>Components</u>	<u>Value</u>	<u>Determinant</u>	<u>Specimen</u>	<u>Sampling Time</u>
Phenol (CAS 108-95-2)	250 mg/g	Phenol with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document

Section 8. Exposure Controls/Personal Protection

Exposure guidelines

US- California OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US- Minnesota Haz Subs: Skin designation applies

Diethylenetriamine (CAS 111-40-0) Skin designation applies

Phenol (CAS 108-95-2) Skin designation applies

US- Tennessee OELs: Skin designation

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US- ACGIH Threshold Limit Values: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Ethylenediamine (CAS 107-15-3) Can be absorbed through the skin.

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US- NIOSH Pocket Guide to Chemical Hazards: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US- OSHA Table Z-1 Limits for Air Contaminants: Skin designation

Phenol (CAS 108-95-2) Can be absorbed through the skin.

Appropriate engineering controls

Good ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measure, such as personal protective equipment

Eye protection

Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.

Skin Protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.

Other

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Wear chemical resistance clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Use a respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hygiene measure

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the work station location.

Section 9. Physical and Chemical Properties

Appearance	
Physical state	Liquid
Color	Amber
Odor	Slight
Odor threshold	Not available
pH	Not available
Melting point	Not available
Boiling point	Not available
Flash Point	210 °F (98.9 ° C) Pensky- Martens Closed Cup
Evaporation rate:	Not available
Flammability(solid, gas)	Not available
Lower & upper explosive (flammable) limits	Lower : Not available Upper : Not available
Vapor density	Not available
Vapor pressure	Not available
Relative density	8.28 lbs/gal
Specific Gravity	0.99
Solubility	Not available
Partition coefficient: n-octanol/water (log K_{ow})	Not available
Auto- ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Flammability class	Combustible III B estimated
VOC	< 25 g/l Mixed components

Section 10. Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	This product is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid:	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

Section 11. Toxicological Information

Information on likely routes of exposure

Eye contact	Causes serious eye damage.
Inhalation	Harmful if inhaled
Skin contact	Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.
Ingestion	Causes digestive tract burns. Harmful if swallowed.

Section 11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics.

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness could result.

Information of toxicological effects

Acute toxicity

Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed.

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitizer

May cause an allergic skin reaction.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity

Not classified

Single exposure

Specific target organ toxicity

Not classified

repeated exposure

Aspiration hazard

Not an aspiration hazard.

Chronic effects

Prolonged inhalation may be harmful.

Section 12. Ecological Information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Persistence and degradability

No data is available on the degradability of this product.

Bio accumulative potential

Partition coefficient n-octanol/water (log K_{ow})

Benzyl Alcohol 1.1

Ethylenediamine -2.04

Phenol 1.46

Mobility in soil

No data is available on this product.

Other adverse effects





The product contains volatile organic compounds which have a photochemical ozone creation potential.

Section 13. Disposal Considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recycled products via a licensed waste disposal contractor. Waste should not be disposed of to a sewer. 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 empty 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, water ways, drains and sewers.

Section 14. Transportation information

	DOT Classification*	IMDG	IATA
UN Number	UN 3066	UN 3066	UN 3066
UN Proper Shipping Name	Paint,	Paint, Marine Pollutant	paint
Transportation hazard class(es)	8 	8  	8 
Packing Group	III	III	III
Environmental Hazard	Yes	Yes- Marine pollutant	Yes

* refer to current shipping regulations to determine when a marine pollutant label must be affixed on a DOT regulated shipment.

Section 15. Regulatory Information

U.S. Federal regulations: United States TSCA section 12(b) Export notification (40 CFR707, Subpt. D)- not regulated.

CERCLA Hazardous Substance list The following components are listed: Ethylenediamine and Phenol.

SARA 302 Extremely hazardous substance Ethylamine (CAS # 107-15-3)

SARA 304 Emergency release information Phenol (CAS # 108-95-2)

SARA 311/312 Ethylamine (CAS # 107-15-3) 5000 lbs

SARA 313 Phenol (CAS # 108-95-2) 1000 lbs

Clean Air Act (CAA) Acute hazard

section 112 Hazardous Air Pollutants (HAPs) list Phenol (CAS # 108-95-2) 1-2.5%

Clean Air Act (CAA) section 112 (r) Accidental Release Prevention. Phenol (CAS # 108-95-2)

Safe Drinking Water Act (SDWA) Ethylenediamine (CAS# 107-15-3)

Not regulated

FEMA Priority Substance Respiratory Health and Safety in the Flavor Manufacturing Workplace

Phenol Low priority

U.S. State regulations**California Prop 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): this material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

U.S. California . Candidate Chemical List. Safer Consumer Products Regulations (Cal. Code Regs, tit.22, 69502.3, Subd. (a))

Ethylenediamine (CAS# 107-15-3)

Phenol (CAS 108-95-2)

16. Other Information

Date of revision:	3/18/19
Date of previous issue	12/7/15
Revisions:	<p>Section 2 Update response instruction. Add supplemental information.</p> <p>Section 3 Remove 4-tert-butylphenol from the ingredient table.</p> <p>Section 4 Update health effects.</p> <p>Section 5 Update firefighting requirements</p> <p>Section 6 Update environmental precautions.</p> <p>Section 7 Update storage instructions.</p> <p>Section 8 Add additional information regarding chemical exposure limits.</p> <p>Section 9 Add Specific gravity and VOC values.</p> <p>Section 11 Update Toxicological information</p> <p>Section 12 Update information regarding other adverse effects.</p> <p>Section 14 Update shipping information</p> <p>Section 16 Remove HMIS information</p>
Version	2
Prepared by	C. Rogalski

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