

## Safety Data Sheet

---

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

Ennis-Flint  
115 Todd Court  
Thomasville, NC 27360

Company Phone Number: 1-800-331-8118  
24-Hour Emergency Phone: 1-800-424-9300 CHEMTREC

Product Name: **AirMark® Sealer, Part A**

Recommended Use: Epoxy Resin; for further information refer to Technical Data Sheet

Issue Date: 04/23/2009

Revised Date: 06/10/2015

Revision Number: 2

### Section 2: HAZARDS IDENTIFICATION

Emergency Overview:           Color: Amber   Form: Liquid   Odor: Mild

ROUTES OF ENTRY:    EYE: YES           SKIN: YES           INGESTION: YES        INHALATION: YES

GHS Label elements, including precautionary statements:

Pictogram



Signal word

**Danger!**

PHYSICAL HAZARDS: Not Classified

HEALTH HAZARDS: (ACUTE AND CHRONIC)

EYES:	Eye Irritant Cat. 2
SKIN:	Skin Irritant Cat. 2
INGESTION:	No Data
INHALATION:	No Data

ENVIRONMENTAL HAZARDS:

Acute Aquatic Cat.2  
Chronic Aquatic Cat.2

HAZARD STATEMENTS:

H315- Causes skin irritation  
H317- May cause an allergic skin reaction  
H319-Causes serious eye irritation  
H318 Causes serious eye damage  
H411-Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS:

P262-Do not get in eyes, on skin, or on clothing  
P264-Wash...thoroughly after handling with soap and water  
P280-Wear Protective gloves/protective clothing/eye protection/face protection  
P273-Avoid release to the environment  
P310-Immediately call a POISON CENTER and 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.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Persons with preexisting skin or respiratory disorders may have their conditions aggravated by over exposure to this material.

**Section 3: COMPOSITION INFORMATION**

HAZARDOUS COMPONENTS	CAS #:	CAL-OSHA PEL TWA (8hours)	ACGIH TLV TWA (8 hours)	Other Limits RECOMMENDED	% BY WEIGHT
1,3-Bis(2,3-epoxypropoxy)-2,2-dimethylpropane	17557-23-2	No Data	No Data		30-45
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5	No Data	No Data		50-70
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8	No Data	No Data		<1

**Section 4: FIRST AID MEASURES**

EYES:	Immediately flush eyes with water for a minimum of 15 minutes while holding eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, consult a physician.
SKIN:	Remove contaminated clothing and product. Immediately wash affected area with soap and water. Do not apply greases or ointments. If skin irritation persists, consult a physician.
INGESTION:	Rinse mouth immediately. Give small amounts of water, only if person is conscious. Only induce vomiting at the instruction of medical personnel. consult a physician
INHALATION:	Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, consult a physician.

**Section 5: FIRE FIGHTING MEASURES**

SUITABLE EXTINGUISHING MEDIA:	Extinguish with foam, carbon dioxide, dry powder, or water fog.
SPECIAL FIRE FIGHTING PROCEDURES:	Use standard fire-fighting procedures and consider the hazards of other involved materials. In case of a fire and / or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
HAZARDOUS DECOMPOSITION PRODUCTS:	Hazardous decomposition products may occur when material polymerizes at temperatures above 500°F (260°C). Irritating and toxic gases/fumes may be released during a fire. Do not allow run-off from fire-fighting to enter drains or water courses.
FLASH POINT:	>250°F / 121°C
METHOD USED:	PMCC

**Section 6: ACCIDENTAL RELEASE MEASURES**

PERSONAL PROTECTION:	Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained.
ACCIDENTAL RELEASE MEASURES:	In case of spill, clean up using absorbent material such as earth or sand. Small quantities can be wiped up with cloth, place cloth in leak proof container and dispose of properly.
WASTE DISPOSAL:	Observe Federal, State and local regulations covering chemical waste spills.

**Section 7: HANDLING AND STORAGE**

PERSONAL PROTECTION:	Use personal protective equipment to ensure product does not contact eyes or skin when handling materials.
HANDLING AND STORAGE:	Store in cool dry place out of direct sun rays. Keep from freezing. Recommend storage temperatures range: between 40° and 95°F (4° - 35°C)

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

PROTECTIVE MEASURE:	Wear appropriate personal protective equipment.
EYE PROTECTION:	Wear appropriate safety glasses with side shields, goggles or full face shield.
HAND PROTECTION:	Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.
SKIN AND BODY PROTECTION:	Wear long sleeve shirts/long pants and other clothing as required to minimize contact.
RESPIRATORY PROTECTION:	Do not breathe gas/fumes/vapour/ or spray. The use of a respirator is not required during general use of this product provided adequate ventilation. If grinding or cutting cured product the use of an approved respirator is recommended.

**WORK HYGIENIC PRACTICES:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**ENGINEERING CONTROLS:** When using indoors good ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Ready access to running water is required. Provide eyewash station.

**EXPOSURE LIMITS**

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH (Pocket Guide)
1,3-Bis(2,3-epoxypropoxy)-2,2-dimethylpropane 17557-23-2	No Data	No Data	No Data
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol 9003-36-5	No Data	No Data	No Data
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane 2530-83-8	No Data	No Data	No Data

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE:** Amber Color

**ODOR:** mild

**PHYSICAL STATE:** Liquid

**pH AS SUPPLIED:** N/D

**BOILING POINT:** >100 C

**MELTING POINT:** N/D

**FREEZING POINT:** N/D

**VAPOR PRESSURE (mmHg):** N/D

**VAPOR DENSITY (AIR = 1):** >1

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 1.1 @ 25°C

**EVAPORATION RATE:** Negligible

**SOLUBILITY IN WATER:** Minimal

**PERCENT SOLIDS BY WEIGHT:** 0%

**PERCENT VOLATILE:** Negligible

**VOLATILE ORGANIC COMPOUNDS (VOC):** ND

**MOLECULAR WEIGHT:** ND

**VISCOSITY:** ND

**Section 10: STABILITY AND REACTIVITY**

**STABILITY:** Stable

**CONDITIONS TO AVOID (STABILITY):** Exposure to excessive heat and open flame

**INCOMPATIBILITY (MATERIAL TO AVOID):** Strong acids, peroxides and other oxidizing agents.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Normal combustion forms carbon dioxide, carbon monoxide, oxides of carbon and other organic compounds,

**HAZARDOUS POLYMERIZATION:** Will not occur

**Section 11: TOXICOLOGY INFORMATION**

**Acute Oral Toxicity:** Not classified Category 5

**Acute Dermal Toxicity:** Not Classified

**Acute Inhalation Toxicity:** Not Classified

**Skin Irritation:** Slightly irritating

**Eye Irritation:** Not Irritating

**Respiratory Irritation:** Not Classified

**Sensitization:** Moderate Dermal Sensitization

**Maternal Toxicity:** Not Classified

**Carcinogenicity:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

**ACGIH:** No Data

**IARC:** No Data

**NTP:** No Data

**OSHA:** No Data

## Section 12: ECOLOGICAL INFORMATION

Component	Species	Results
9003-36-5 :Fish LC50	Salmo Gairdneri	0.5mg/l, 96 hrs
9003-36-5 :Aquatic acute Algae EC50	elenastrum capricornutum	1.8mg/l, 72 hrs

ECOTOXICITY:  
 PERSISTENCE & DEGRADABILITY: No Biodegradation  
 BIOACCUMULATIVE POTENTIAL: Not bioaccumulative  
 MOBILITY IN SOIL: NDA  
 OTHER ADVERSE EFFECTS: NDA  
 AQUATIC RELEASE: Advise authorities if product has entered or may enter watercourses or sewer drains.

## Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not allow this material to drain into sewers / waterways, ditches, containment pools or water supplies. Dispose of contents / containers in accordance with local/regional/international regulations.

## Section 14: TRANSPORTATION INFORMATION

### U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:  
 HAZARD CLASS:  
 ID NUMBER: Not Regulated for transportation  
 PACKING GROUP:  
 LABEL STATEMENT:

HAZARD CLASS: NONE ID NUMBER: NONE D.O.T SHIPPING LABEL: NOT REGULATED BY D.O.T

### WATER TRANSPORTATION

PROPER SHIPPING NAME:  
 HAZARD CLASS:  
 ID NUMBER: Not Regulated for transportation  
 PACKING GROUP:  
 LABEL STATEMENT:

### AIR TRANSPORTATION

PROPER SHIPPING NAME: Environmentally Hazardous Substance, Liquid N.O.S. (Epoxy Resin Mixture)  
 HAZARD CLASS: 9  
 ID NUMBER: UN3082  
 PACKING GROUP: III  
 LABEL STATEMENT:

## Section 15: REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT):  
 CERCLA (COMPREHENSIVE RESPONSE  
 COMPENSATION, AND LIABILITY ACT):  
 OSHA: 29 CFR 1910.1200 (Hazard Communication required)  
 WHMIS: Class D-2B, Material Causing other toxic effects

### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

302/304 N/A  
 311/312 HAZARD CATEGORIES: Acute Health Hazard: Yes  
 Chronic Health Hazard: Yes  
 Fire Hazard: No  
 Pressure Release Hazard: No  
 Reactivity Hazard: No  
 313 REPORTABLE INGREDIENTS: N/A

### STATE REGULATIONS:

CALIFORNIA PROPOSITION 65 (THE SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT of 1986)  
 This product does not contain known levels of any chemicals known to cause cancer or reproductive harm.

**Section 16: OTHER INFORMATION**

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM	
HMIS HAZARD RATING	
HEALTH	2
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	C
4 – Severe, 3 – Serious, 2 – Moderate, 1 - Slight	
C – (Safety glasses, gloves, apron)	

Issue Date: 04/23/2009

Revised Date: 06/10/2015

Revision Number: 2

Revision Note: Updated to GHS format.

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.



## Safety Data Sheet

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

Ennis-Flint  
115 Todd Court  
Thomasville, NC 27360

Company Phone Number: 1-800-331-8118  
24-Hour Emergency Phone: 1-800-424-9300 CHEMTREC

Product Name: **AirMark® Sealer<sub>1</sub> Part B**

Recommended Use: Epoxy Resin; for further information refer to Technical Data Sheet

Issue Date: 04/23/2009

Revised Date: 06/10/2015

Revision Number: 2

### Section 2: HAZARDS IDENTIFICATION

Emergency Overview:           Color: Black   Form: Liquid   Odor: Mild/ Ammonia

ROUTES OF ENTRY:   EYES: YES           SKIN: YES           INGESTION: YES           INHALATION: YES

GHS Label elements, including precautionary statements:



Pictogram

Signal word

**Danger!**

PHYSICAL HAZARDS: Not Classified

HEALTH HAZARDS (ACUTE AND CHRONIC)

EYES:	Serious Eye Damage Cat. 1.
SKIN:	Skin Irritant Cat. 2 Skin Sensitization Cat. 1. Skin Corrosion Cat. 1B
INGESTION:	Acute Oral Toxicity Cat. 4 Reproductive Toxicity Cat. 1B. Specific target organ toxicity- single exposure Cat.3
INHALATION:	Reproductive Toxicity Cat. 1B. Specific target organ toxicity- single exposure Cat.3

ENVIRONMENTAL HAZARDS:

Acute Aquatic Cat.2  
Chronic Aquatic Cat.2  
Acute Toxicity Cat.4

HAZARD STATEMENTS:

H302+H312+H332:Harmful if swallowed, inhaled or in contact with skin  
H314:Causes severe skin burns and eye damage  
H315- Causes skin irritation  
H317:May cause an allergic skin reaction  
H318- Causes serious eye damage  
H360-May damage fertility or the unborn child.  
H411-Toxic to aquatic life with long lasting effects

**PRECAUTIONARY STATEMENTS:**

P201- Obtain special instructions before use  
 P261- Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P264-Wash...thoroughly after handling with soap and water  
 P270-Do not eat, drink or smoke when using this product.  
 P271-Use only outdoors or in a well-ventilated area  
 P273-Avoid release to the environment  
 P280-Wear Protective gloves/protective clothing/eye protection/face protection  
 P301+P312-IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P301+P330+P331: IF SWALLOWED: rinse mouth. DO NOT induce vomiting.  
 P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 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.  
 P310:Immediately call a POSION CENTER or doctor/physician  
 P333+P337+P313: If skin irritation or rash occurs and/or eye irritation persists: Get medical advice/attention.  
 P363: Wash contaminated clothing before reuse.  
 P391: Collect spillage.  
 P405: Store locked up.  
 P501: Dispose of contents/container to an approved waste disposal plant.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

Persons with preexisting skin or respiratory disorders may have their conditions aggravated by over exposure to this material.

**Section 3: COMPOSITION INFORMATION**

HAZARDOUS COMPONENTS	CAS #:	CAL-OSHA PEL TWA (8hours)	ACGIH TLV TWA (8 hours)	Other Limits RECOMMENDED	% BY WEIGHT
4-tert-Butylphenol	98-54-4	No Data	No Data		<45%
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	No Data	No Data		<9%
Bis(dimethylaminomethyl)phenol	71074-89-0	No Data	No Data		<2%
2,2,4(2,4,4)-Trimethyl-1,6-hexanediamine	25620-58-0	No Data	No Data		<23%
m-Xylylenediamine	1477-55-0	No Data	No Data		<30%

**Section 4: FIRST AID MEASURES**

**EYES:** Immediately flush eyes with water for a minimum of 15 minutes while holding eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, consult a physician.

**SKIN:** Remove contaminated clothing and product. Immediately wash affected area with soap and water. Do not apply greases or ointments. If skin irritation persists, consult a physician.

**INGESTION:** Rinse mouth immediately. Give small amounts of water, only if person is conscious. Only induce vomiting at the instruction of medical personnel. consult a physician

**INHALATION:** Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, consult a physician.

**Section 5: FIRE FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:** Extinguish with foam, carbon dioxide, dry powder, or water fog.

**SPECIAL FIRE FIGHTING PROCEDURES:** Use standard fire-fighting procedures and consider the hazards of other involved materials. In case of a fire and / or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hazardous decomposition products may occur when material polymerizes at temperatures above 500°F (260°C). Irritating and toxic gases/fumes may be released during a fire. Do not allow run-off from fire-fighting to enter drains or water courses.

**FLASH POINT:** 230°F / 110°C  
**METHOD USED:** (PMCC)

**Section 6: ACCIDENTAL RELEASE MEASURES**

**PERSONAL PROTECTION:** Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained.

ACCIDENTAL RELEASE MEASURES: In case of spill, clean up using absorbent material such as earth or sand. Small quantities can be wiped up with cloth, place cloth in leak proof container and dispose of properly.

WASTE DISPOSAL: Observe Federal, State and local regulations covering chemical waste spills.

## Section 7: HANDLING AND STORAGE

PERSONAL PROTECTION: Use personal protective equipment to ensure product does not contact eyes or skin when handling materials.

HANDLING AND STORAGE: Store in cool dry place out of direct sunrays. Keep from freezing. Recommend storage temperatures range: between 40° and 95°F (4° - 35°C)

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE MEASURE: Wear appropriate personal protective equipment.

EYE PROTECTION: Wear appropriate safety glasses with side shields, goggles or full face shield. When working on an overhead application a full face shield is recommended.

HAND PROTECTION: Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.

SKIN AND BODY PROTECTION: Wear long sleeve shirts/long pants and other clothing as required to minimize contact.

RESPIRATORY PROTECTION: Do not breathe gas/fumes/vapour/ or spray. The use of a respirator is not required during general use of this product provided adequate ventilation. If grinding or cutting cured product the use of an approved respirator is recommended.

WORK HYGIENIC PRACTICES: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

ENGINEERING CONTROLS: When using indoors, good ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Ready access to running water is required. Provide eyewash station.

### EXPOSURE LIMITS

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH (Pocket Guide)
4-tert-ButylAlcohol 98-54-4	No Data	No Data	No Data
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	No Data	No Data	No Data
Bis(dimethylaminomethyl)phenol 71074-89-0	No Data	No Data	No Data
2,2,4(2,4,4)-Trimethyl-1,6-hexanediamine 25620-58-0	No Data	No Data	No Data
m-Xylylenediamine 1477-55-0	No Data	No Data	C 0.1 mg/m3 [skin]

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Black liquid

ODOR: Mild/ Ammonia

PHYSICAL STATE: Liquid

pH AS SUPPLIED: Basic

BOILING POINT: >150C

MELTING POINT: N/D

FREEZING POINT: N/D

VAPOR PRESSURE (mm Hg): <0.1

VAPOR DENSITY (AIR = 1): N/D

SPECIFIC GRAVITY (H2O = 1): >1.2

EVAPORATION RATE: Negligible

SOLUBILITY IN WATER: Slight

PERCENT SOLIDS BY WEIGHT: No Data

PERCENT VOLATILE: Negligible

VOLATILE ORGANIC COMPOUNDS (VOC): No Data

MOLECULAR WEIGHT: N/D

VISCOSITY: 150 cps.

## Section 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY): Exposure to excessive heat and open flame

INCOMPATIBILITY (MATERIAL TO AVOID): Strong acids, peroxides and other oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Normal combustion forms carbon dioxide, carbon monoxide, oxides of carbon and other organic compounds,

HAZARDOUS POLYMERIZATION: Will not occur



**Section 11: TOXICOLOGY INFORMATION**

Acute Oral Toxicity:	No data available on the product itself
Oral-Components	
4-tert-Butylphenol:	LD50 >2000mg/kg (OECD Test Guidelines401)
m-Xylylenediamine	LD50 >200mg/kg Species Rat
Acute Dermal Toxicity:	No data available on the product itself
Dermal-Components	
Acute Inhalation Toxicity:	No data available on the product itself
m-Xylylenediamine	LC50 1.34mg/l Species Rat
4-tert-Butylphenol	LCLO 5.6mg/l Species Rat OCED test guideline 403
Skin Corrosion/ Irritation:	Severe Skin Irritation/Corrosion
Corrosion/Irritation Components	
m-Xylylenediamine	Corrosive (skin)
Eye Damage/Irritation:	Severe eye damage/irritation
Damage/Irritation Components	
4-tert-Butylphenol	Cat. 1 irreversible effects on the eye
Respiratory Damage/Irritation:	Severe respiratory damage/irritation.
Damage/irritation Components	
Sensitization:	May cause sensitization by inhalation and skin contact.
Sensitization Components	
m-Xylylenediamine	Sensitizer (skin)
Germ Cell Mutagenicity	The product or a component may be mutagenic, the data is inconclusive.
Maternal Toxicity:	No data available on the product itself
Carcinogenicity:	This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.
ACGIH:	No data
IARC:	No data
NTP	No data
OSHA	No data

**Section 12: ECOLOGICAL INFORMATION**

ECOTOXICITY:	
Aquatic toxicity:	Exposure at low concentrations may kill fish
Toxicity to Fish-Components	
m-Xylylenediamine	LC50(96hr): 87.6mg/L Species: Killfish
4-tert-Butylphenol	LC50(96hr): 5.14mg/l Species: Fathead Minnow
Toxicity to algae-Components	
m-Xylylenediamine	EC50(72hr): 20.3mg/l Species: Algae (Pseudokirchnerella subcapitata)
4-tert-Butylphenol	IC50(72hr): 11.2mg/l Species: Algae (Desmodesmus subspicatus)
Toxicity-Aquatic Invertebrates	
m-Xylylenediamine	EC50(48hr): 15.2mg/l Species Daphnia magna
4-tert-Butylphenol	EC50(48hr) 4.8mg/l Species: Daphnia magna (OECD Test Guideline 202)
Toxicity to other organisms:	EC50(30min): 156mg/l Bacteria: Pseudomonas putida
PERSISTENCE & DEGRADABILITY:	
BIODEGRADABILITY:	
Biodegradability-Components	
4-tert-Butylphenol	60% Biodegradable: aerobic-exposure time 28d (OECD Test Guideline 301F)
m-Xylylenediamine	49% Not readily biodegradable : 28d
BIOACCUMULATIVE POTENTIAL:	
Bioaccumulative-Components:	
4-tert-Butylphenol	BCF 120 (3d): 46ug/L Species: Leuciscus idus melanotus
	BCF 20.43(8w): 40mg/L Species Cyprinus carpio
m-Xylylenediamine	Low potential for bioaccumulation
MOBILITY IN SOIL:	NDA
OTHER ADVERSE EFFECTS:	NDA
AQUATIC RELEASE:	Advise authorities if product has entered or may enter watercourses or sewer drains.

**Section 13: DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD:	Do not allow this material to drain into sewers / waterways, ditches, containment pools or water supplies. Dispose of contents / containers in accordance with local/regional/international regulations.
------------------------	--

**Section 14: TRANSPORTATION INFORMATION**

## U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME: Amines, liquid, corrosive, n.o.s.( m-Xylylenediamine)  
 HAZARD CLASS: 8  
 ID NUMBER: UN2735  
 PACKING GROUP: II  
 LABEL STATEMENT: Corrosive, Hazard Class 8, Paging Group: PG II

## WATER TRANSPORTATION (IMDG)

PROPER SHIPPING NAME: Amines, liquid, corrosive, n.o.s.( m-Xylylenediamine)  
 HAZARD CLASS: 8  
 ID NUMBER: UN2735  
 PACKING GROUP: II  
 LABEL STATEMENT: Corrosive, Hazard Class 8, Paging Group: PG II

## AIR TRANSPORTATION (IATA / ICAO)

PROPER SHIPPING NAME: Amines, liquid, corrosive, n.o.s.( m-Xylylenediamine)  
 HAZARD CLASS: 8  
 ID NUMBER: UN2735  
 PACKING GROUP: II  
 LABEL STATEMENT: Corrosive, Hazard Class 8, Paging Group: PG II

**Section 15: REGULATORY INFORMATION**

## U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT):  
 CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not Listed  
 OSHA: 29 CFR 1910.1200 (Hazard Communication required)  
 WHMIS: Class E: Corrosive, Class D-2A Material Causing other toxic effects)

## SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

302/304 No  
 311/312 HAZARD CATEGORIES: Acute Health Hazard: Yes  
 Chronic Health Hazard: Yes  
 Fire Hazard: No  
 Pressure Release Hazard: No  
 Reactivity Hazard: No

313 REPORTABLE INGREDIENTS: None

## STATE REGULATIONS:

CALIFORNIA PROPOSITION 65 (THE SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT)

This product contains chemicals in trace quantities that are on the California Proposition 65 carcinogens list.

**Section 16: OTHER INFORMATION**

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM	
HMIS HAZARD RATING	
HEALTH	3
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	C
4 – Severe, 3 – Serious, 2 – Moderate, 1 - Slight	
C – (Safety glasses, gloves, apron)	

Issue Date: 04/23/2009

Revised Date: 06/10/2015

Revision Number: 2

Revision Note: Updated to GHS format.

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.