SAFETY DATA SHEET

Print date: 05/15/2017 **Revision Date:** 05/15/2017 **Revision Number:** 2.01

1. IDENTIFICATION

Product identifier

Product Name: SynDeck® Bond Coat Part B Hardener SB1222

Product code: SB1222

Other means of identification

Synonyms No information available

Application

Recommended Use Deck Coating

Uses advised against For industrial use only

Supplier/Manufacturer:

Supplier:
EPMAR Corporation
13240 E. Barton Circle
Whittier, CA 90605-3254
Phone: 562-946-8781
FAX: 562-944-9958
E-mail: she@quakerchem.com
(For Health and Safety Questions)

Emergency telephone number:
* 24 HOUR TRANSPORTATION:
**CHEMTREC: 1-800-424-9300
+703-527-3887 (Call collect outside of US)
* 24 HOUR EMERGENCY HEALTH & SAFETY:
**(800) 523-7010 (Within US only) Outside of US call (703) 527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Reproductive toxicity	Category 2
Chronic aquatic toxicity	Category 2

Label Elements

Emergency Overview

DANGER

Hazard Statements
Harmful if swallowed
Harmful in contact with skin
Causes skin irritation
Causes serious eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
Toxic to aquatic life with long lasting effects

Appearance Hazy Amber **Physical State** Liquid **Odor** Amine

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Avoid release to the environment

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

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
IF ON SKIN: Wash with plenty of water and soap Call a POISON CENTER or doctor if you feel unwell Take off contaminated clothing and wash it before reuse If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth
Collect spillage

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
None known

Other Information
Toxic to aquatic life.

Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Trimethylolpropane polyoxypropylene triamine	39423-51-3	90 - 100%
Piperazine	110-85-0	1 - 5%
Aminoethylpiperazine	140-31-8	<1%

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin contact: Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off immediately with soap and plenty of water.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person

Inhalation: Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Consult a physician.

Note to physician: Aspiration may cause pulmonary oedema and pneumonitis.

Medical condition aggravated by exposure:	Dermatitis and asthma. Lung diseases. Some symptoms of pre-existing eye disease could be aggravated by overexposure to a component of this product.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Use dry chemical, CO2, water spray or `alcohol` foam. Do not use water with full jet.
Specific hazards:	Do not allow material to contaminate ground water system.
Special protective equipment for fire-fighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
Specific methods:	Water mist may be used to cool closed containers

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapour/dust. Wash thoroughly after handling.
Environmental precautions:	Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling

Technical measures/precautions:	Provide sufficient air exchange and/or exhaust in work rooms.
Safe handling advice:	In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe vapors or spray mist. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

Storage

Technical measures/storage conditions:	Store at room temperature in the original container. If stored above 100°F, a nitrogen atmosphere is recommended. Keep away from contact with water.
Incompatible products:	strong acids and oxidizing agents
Safe storage temperature:	50 - 100 °F
Shelf life:	2 years

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH Exposure Limits	OSHA TWA (final)	NIOSH - Pocket Guide
2,2',2''-Nitrilotriethanol	5 mg/m^3 (TWA)	None	None
Piperazine	0.03 ppm (TWA)	None	None

Engineering measures: Ensure adequate ventilation

Personal Protective Equipment:

General: Provide easy access to eyewash/safety shower facilities.

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, respiratory protection may be required. Contact your site safety representative for proper respirator selection.

Eye protection: Tightly fitting safety goggles, Face-shield

Hand protection: Solvent-resistant gloves, Neoprene gloves

Skin and body protection: Chemical resistant apron, Impervious clothing

Hygiene measures: Handle in accordance with sound chemical hygiene practices. Wear the appropriate PPE. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke while using chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Hazy Amber
Odor	Amine
Odor Threshold	No information available
pH concentrate:	No information available
pH Dilution	No information available
Melting/freezing point	No information available
Boiling Point/Range	No information available
Flash Point	> 100 °C / > 212 °F

Method	PMCC (Pensky-Martens Closed-Cup)
Evaporation rate	No information available
Flammability Limits in Air	
upper flammability limit	No information available
lower flammability limit	No information available
VOC Content Product (lb/gal)	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity (g/cc, 15 C)	0.989
Bulk Density (lb/gal, 15 C)	8.25
Water Solubility	Insoluble
Solubility in other solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition Temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Molecular Weight	No information available

10. STABILITY AND REACTIVITY

Stability: This material reacts violently with acids.

Conditions to avoid: None known.

Materials to avoid: Strong acids and oxidising agents.

Hazardous decomposition products: Ammonia gas may be liberated at high temperatures. Carbon oxides. Nitrogen oxides (nox). Aldehydes. Ketones.

Hazardous Polymerization: No information available.

11. TOXICOLOGICAL INFORMATION

No toxicological information is available on the product. Data obtained on components are summarized below.

Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract.

Eye Contact Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact Irritating to skin. May cause sensitization by skin contact. Harmful in contact with skin.

Ingestion Harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trimethylolpropane polyoxypropylene triamine	-	-	-
Piperazine	= 600 mg/kg (Rat) Oral LD50 Rat 600 mg/kg (Source: JAPAN_GHS)	= 1590 mg/kg (Rabbit) Dermal LD50 Rabbit 1590 mg/kg (Source: JAPAN_GHS)	-
Aminoethylpiperazine	= 2140 µL/kg (Rat) Oral LD50 Rat 2140 µL/kg (Source: NLM_CIP)	= 880 µL/kg (Rabbit) Dermal LD50 Rabbit 880 µL/kg (Source: NLM_CIP)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	IARC Carcinogens	NTP	OSHA - Select Carcinogens
Trimethylolpropane polyoxypropylene triamine	Not listed	Not listed	Not listed
Piperazine	Not listed	Not listed	Not listed
Aminoethylpiperazine	Not listed	Not listed	Not listed

Sensitization Product contains a component that is classified as a skin sensitizer. No studies have been conducted on the product itself.

Mutagenic effects: No information available.

Reproductive Toxicity Product contains a component that is classified as a reproductive hazard. No testing has been conducted on the product itself.

Developmental Toxicity No information available.

Teratogenic No information available.

Specific target organ systemic toxicity (single exposure) No information available.

Specific target organ systemic toxicity (repeated exposure) No information available.

Other Adverse Effects This product contains triethanolamine. Liver and kidney damage has been demonstrated in animals from chronic exposure to triethanolamine. These effects were generally seen in feeding or drinking water studies; however, there was at least one positive finding in studies with dermal absorption. The relevance of animal test data to humans is unknown at this time.

Aspiration hazard No information available.

Additional information on toxicological effects
No information available

This product contains triethanolamine. Liver and kidney damage has been demonstrated in animals from chronic exposure to triethanolamine. These effects were generally seen in feeding or drinking water studies; however, there was at least one positive finding in studies with dermal absorption. The relevance of animal test data to humans is unknown at this time.

12. ECOLOGICAL INFORMATION

Chemical Name	Ecotoxicity - Fish Species Data:	Ecotoxicity - Freshwater Algae Data:	Ecotoxicity - Water Flea Data:
Trimethylolpropane polyoxypropylene triamine	No data	No data	No data
Piperazine	> 10000 mg/L LC50	No data	EC50 (water flea - 96h) = 6915 mg/L
Aminoethylpiperazine	1950 - 2460 mg/L LC50 > 1000 mg/L LC50 >= 100 mg/L LC50	=32mg/L = 495 mg/L EC50	EC50 (Daphnia magna - 48h) = 32 mg/L

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability No information available.

Bioaccumulation No information available.

Chemical Name	Octanol/water partition coefficient
Trimethylolpropane polyoxypropylene triamine	-1.13
Piperazine	-
Aminoethylpiperazine	-1.48

Mobility: No data available

Ozone: No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a

permitted facility or as advised by your local hazardous waste regulatory authority.

Contaminated packaging: Do not re-use empty containers

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) Sweep up and shovel into suitable containers for disposal

14. TRANSPORT INFORMATION

U. S. DEPARTMENT OF TRANSPORTATION:

UN/NA ID Number:	UN3082
Proper shipping name:	Environmentally hazardous substances, liquid, N.O.S. (contains trimethylolpropane polyoxypropylenetriamine)
Hazard class:	9
PG:	III
DOT ERG:	ERG 171

TDG (CANADA):

UN nr:	UN3082
Proper shipping name:	Environmentally hazardous substances, liquid, N.O.S. (contains trimethylolpropane polyoxypropylenetriamine)
TDG Hazard Classification:	9
Packing group:	III

IMDG/IMO:

UN nr:	UN3082
Proper shipping name:	Environmentally hazardous substances, liquid, N.O.S. (contains trimethylolpropane polyoxypropylenetriamine)
Class:	9
Packing group:	III
EMS:	F-A, S-F
Limited quantity:	5 L
Marine pollutant:	Marine Pollutant

IATA/ICAO:

UN nr:	UN3082
Proper shipping name:	Environmentally hazardous substances, liquid, N.O.S. (contains trimethylolpropane polyoxypropylenetriamine)
Hazard Class:	9
Packing group:	III
Maximum quantity for cargo only:	450 L
Maximum quantity for passenger:	450 L
Limited quantity:	30 kg G
Marine pollutant:	Marine Pollutant

15. REGULATORY INFORMATION

Federal Regulations

OSHA Hazard Communication Standard: This product is considered to be hazardous under the OSHA Hazard Communication Standard.

CERCLA/SARA Information:

SARA (311, 312) hazard class: This product possesses the following SARA Hazard Categories:

Immediate Health (Acute): Yes
Delayed Health (Chronic): Yes
Flammability: No
Pressure: No
Reactivity: No

Chemical Name	Hazardous Substances and RQs	Extremely Hazardous Substances and TPQs	SARA 313 Emission Reporting
Trimethylolpropane polyoxypropylene triamine	Not listed	Not listed	Not listed
Piperazine	Not listed	Not listed	Not listed
Aminoethylpiperazine	Not listed	Not listed	Not listed

Clean Air and Clean Water Acts:

Chemical Name	Hazardous Air Pollutants	CWA - Hazardous Substances	CWA - Toxic Pollutants	CWA - Priority Pollutants
Trimethylolpropane polyoxypropylene triamine	Not listed	Not listed	Not listed	Not listed
Piperazine	Not listed	Not listed	Not listed	Not listed
Aminoethylpiperazine	Not listed	Not listed	Not listed	Not listed

U.S. STATE REGULATIONS (RTK):

Chemical Name	California Proposition 65	PARTK	MI Critical Materials	NJRTK	MARTK
Trimethylolpropane polyoxypropylene triamine	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Piperazine	Not Listed	Present	Not Listed	1540	Present
Aminoethylpiperazine	Not Listed	Present	Not Listed	0075	Present

California Proposition 65 Status: No components are listed

CANADIAN REGULATIONS:

Chemical Name	CEPA Schedule I	Challenge Substances
Trimethylolpropane polyoxypropylene triamine	Not listed	Not listed
Piperazine	Listed	Not listed
Aminoethylpiperazine	Not listed	Not listed

INVENTORY STATUS:

United States TSCA Inventory:	This product complies with TSCA
Canada DSL/NDSL Inventory List	This product complies with DSL

16. OTHER INFORMATION

Sources of key data used to compile the data sheet: Material safety data sheets of the ingredients.

Prepared by: Safety, Health and Environmental Department

Revision Date: 05/15/2017
Reason for revision: This data sheet contains changes from the previous version in section(s) 2.

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

Disclaimer
This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. The company referenced in this Safety Data Sheet assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of such company.

End of Safety Data Sheet