SAFETY DATA SHEET

Print date: 04/21/2016 **Revision Date:** 04/21/2016 **Revision Number:** 1.01

1. COMPANY AND PRODUCT IDENTIFICATION

Product identifier

Product Name: SynDeck® Waterproof Membrane Part A Hardener SA2102

Product code: SA2102

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
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory Sensitization	Category 1A
Skin Sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Label Elements

Emergency Overview

DANGER

Hazard Statements
harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of causing cancer
may cause respiratory irritation
May cause damage to organs through prolonged or repeated exposure

Appearance Amber **Physical State** Liquid **Odor** No information available

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
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
wear protective gloves
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Specific treatment (see First Aid on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water Take off contaminated clothing and wash before reuse If skin irritation or rash occurs: Get medical advice/attention
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

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

Hazards not otherwise classified (HNOC)
None known

Other Information
None known.

Unknown acute toxicity 45% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No	Weight %
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	59675-67-1	40 - 50%
Diphenylmethane-4,4`-diisocyanate	101-68-8	40 - 50%
Diphenylmethane diisocyanate (MDI) homopolymer	25686-28-6	10 - 15%

Physico-chemical properties: Reacts slowly with water to produce carbon dioxide which may rupture closed containers. This reaction accelerates at higher temperatures.

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. An MDI study has demonstrated that a poly-glycol based skin cleanser or corn oil may be more effective than rinsing with soap and 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 not breathing, give artificial respiration If breathing is difficult, give oxygen Consult a physician.
Note to physician:	Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed for 24-48 hours for signs of respiratory distress.
Medical condition aggravated by exposure:	Dermatitis and asthma. The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Medical supervision of all employees who handle or come into contact with isocyanates is recommended. Contact may aggravate pulmonary disorders. Persons with history of respiratory disease or hypersensitivity should not be exposed to this product. Preemployment and periodic medical examinations with respiratory function tests (FEV, FVC as a minimum) are suggested. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical Carbon dioxide (CO2) Alcohol-resistant foam
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. The efficiency of the ventilation system must be monitored regularly because of the possiblity of blockage. Avoid breathing aerosols, mists and vapors.

Safe handling advice: Do not breathe vapors or spray mist. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

Storage

Technical measures/storage conditions: Do not reseal contaminated containers. Uncontaminated containers, free of moisture, may be resealed only after placing under a nitrogen blanket. Do not store in containers made of copper, copper alloys or galvanized surfaces. DO NOT FREEZE.

Incompatible products: Never allow product to get in contact with water during storage.

Safe storage temperature: 50 - 100 °F

Shelf life: 2 years

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	ACGIH Exposure Limits	OSHA TWA (final)	NIOSH - Pocket Guide
Diphenylmethane-4,4`-diisocyanate	0.005 ppm	None	0.005ppmTWA 0.020ppmCeiling 0.05mg/m³TWA 0.2mg/m³Ceiling

Engineering measures: Ensure adequate ventilation

Personal Protective Equipment:

General: Eye Wash and Safety Shower

Respiratory protection: In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit Wear a positive-pressure supplied-air respirator.

Eye protection: Goggles, If splashes are likely to occur, wear:, Face-shield

Hand protection: Neoprene gloves, Nitrile rubber gloves, Impervious butyl rubber gloves

Skin and body protection: Impervious clothing, Long sleeved clothing, Chemical resistant apron

Hygiene measures: Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

Appearance Amber

Odor	No information available
Odor Threshold	No information available
pH concentrate:	No applicable
pH Dilution	No information available
Melting/freezing point	No information available
Boiling Point/Range	> 300 °C / 572 °F
Flash Point	> 99 °C / > 210 °F
Method	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
VOC Content Product (g/L)	0
VOC less water and exempt (g/L)	0
Solids (% w/w):	100
Volatiles (% by volume) :	0
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity (g/cc, 15 C)	1.126
Bulk Density (lb/gal, 15 C)	9.4
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: Stable under recommended storage conditions.

Conditions to avoid: High temperatures. Do not freeze. Exposure to water vapour. Exposure to moisture. Container can be pressurised by carbon dioxide due to reaction with humid air and/or water. Replace outage with inert dry nitrogen.

Materials to avoid: Reactive metals. Decomposes slowly on exposure to water. Avoid unintended contact with polyols. Avoid contact with acids, water, alcohols, amines, ammonia, bases, moist air, and strong oxidizers. Avoid contact with metals such as aluminum, zinc, brass, copper and galvanized metals. Avoid water as it reacts to form heat, carbon dioxide and insoluble urea. The combined effect of the carbon dioxide and heat can produce pressure to rupture a closed container. The reaction with water is slow at temperatures less than 49°C (120°F), but accelerated at higher temperatures and in the presence of alcohols, acids and bases. Some reactions are violent.

Hazardous decomposition products: Nitrogen oxides (nox). Carbon oxides.

Hazardous Polymerization: Polymerization may occur at elevated temperatures in the presence of alkalies, tertiary amines and metal compounds.

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 Irritating to eyes.

Skin Contact Irritating to skin. May cause sensitization by skin contact.

Ingestion Harmful if swallowed.

Components	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	-	-	-
Diphenylmethane-4,4`-diisocyanate	= 31600 mg/kg (Rat) Oral LD50 Rat 31600 mg/kg (Source: JAPAN_GHS)	-	= 369 mg/m³ (Rat) 4 h Inhalation LC50 Rat 369 mg/m³ 4 h (Source: NZ_CCID)
Diphenylmethane diisocyanate (MDI) homopolymer	-	-	-

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

Components	IARC Carcinogens	NTP	OSHA - Select Carcinogens
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	Not listed	Not listed	Not listed
Diphenylmethane-4,4`-diisocyanate	Group 3	Not listed	Not listed
Diphenylmethane diisocyanate (MDI) homopolymer	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 No information available.

Developmental Toxicity No information available.

Teratogenic No information available.

Specific target organ systemic toxicity (single exposure) Respiratory system.

Specific target organ systemic toxicity (repeated exposure) Causes damage to organs through prolonged or repeated exposure if inhaled.

Aspiration hazard No information available.

Additional information on toxicological effects
No information available

Individuals who develop sensitization to diisocyanates or polyisocyanates may react to a later exposure to these materials at levels well below the exposure limits or guidelines. Sensitization can be permanent.

12. ECOLOGICAL INFORMATION

Components	Ecotoxicity - Fish Species Data:	Ecotoxicity - Freshwater Algae Data:	Ecotoxicity - Water Flea Data:
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	No data	No data	No data
Diphenylmethane-4,4`-diisocyanate	LC50 (Zebra fish - 96h) > 1000 mg/l	EC50 (Daphnia magna - 48h) > 1000 mg/l	No data
Diphenylmethane diisocyanate (MDI) homopolymer	No data	No data	No data

55% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and Degradability No information available.

Bioaccumulation No information available.

Components	Octanol/water partition coefficient
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	-
Diphenylmethane-4,4`-diisocyanate	-
Diphenylmethane diisocyanate (MDI) homopolymer	-

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:** NA3082
- **Proper shipping name:** Other Regulated Substances, Liquid, n.o.s. (methylene diphenyl diisocyante)
- **Hazard class:** 9
- **PG:** III
- **RQ** Methylene diphenyl diisocyanate, RQ= 6291
- **DOT ERG:** ERG 171
- **Additional DOT Information:** When in individual containers of less than the product RQ, this material ships as non-regulated.

TDG (CANADA):

- **Proper shipping name:** Not Regulated

IMDG/IMO:

- **Proper shipping name:** Not Regulated

IATA/ICAO:

- **Proper shipping name:** Not Regulated

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: Yes

Components	Hazardous Substances and RQs	Extremely Hazardous Substances and TPQs	SARA 313 Emission Reporting
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	Not listed	Not listed	Not listed
Diphenylmethane-4,4`-diisocyanate	5000 lb	Not listed	= 1.0 % de minimis concentration Chemical Category N120 = 1.0 % de minimis concentration Listed under `Diisocyanates`
Diphenylmethane diisocyanate (MDI) homopolymer	Not listed	Not listed	Not listed

Clean Air and Clean Water Acts:

Components	Hazardous Air Pollutants	CWA - Hazardous Substances	CWA - Toxic Pollutants	CWA - Priority Pollutants
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	Not listed	Not listed	Not listed	Not listed
Diphenylmethane-4,4`-diisocyanate	Present	Not listed	Not listed	Not listed
Diphenylmethane diisocyanate (MDI) homopolymer	Not listed	Not listed	Not listed	Not listed

U.S. STATE REGULATIONS (RTK):

Components	California Proposition 65	PARTK	MI Critical Materials	NJRTK	MARTK
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Diphenylmethane-4,4`-diisocyanate	Not Listed	Environmental hazard	Not Listed	sn 1253	Present
Diphenylmethane diisocyanate (MDI) homopolymer	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

California Proposition 65 Status: No components are listed

RCRA Status: Not regulated

CANADIAN REGULATIONS:

Components	CEPA Schedule I	Challenge Substances
Isocyanates, reaction product of polyol with methylenediphenyl diisocyanate	Not listed	Not listed
Diphenylmethane-4,4`-diisocyanate	Listed	Not listed
Diphenylmethane diisocyanate (MDI) homopolymer	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: 04/21/2016
Reason for revision: Name change.

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