

Issue Date 25-Jun-2013

Revision Date: 17-Sep-2013

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Spectra-Shield Barrier Coat A-Side

Other means of identification

SDS # CCI-001

Recommended use of the chemical and restrictions on use

Recommended Use Wastewater structure liner protection system.

Details of the supplier of the safety data sheet

Supplier Address

CCI Spectrum, Inc.
4527 Sunbeam Road
Jacksonville, FL 32257

Emergency Telephone Number

Company Phone Number 904-419-4889
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Pale yellow liquid

Physical State Liquid

Odor Faint aromatic odor

Classification

Acute toxicity - Inhalation (Vapors)	Category 2
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Signal Word

Danger

Hazard Statements

Fatal if inhaled
 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 drowsiness or dizziness
 May cause damage to organs through prolonged or repeated exposure

**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
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wear respiratory protection
 Wash face, hands and any exposed skin thoroughly after handling
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves/protective clothing/eye protection/face protection

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
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash it before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a POISON CENTER or doctor/physician

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

WHMIS Classification

Class D-Division 2A Class D-Division 2B

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Methylenediphenyl diisocyanate	26447-40-5	<50
4,4- methylenediphenyl diisocyanate (MDI)	101-68-8	<50

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. Administer oxygen if breathing is difficult. Call a physician immediately.
Ingestion	Do not induce vomiting. Seek immediate medical attention/advice.

Most important symptoms and effects

Symptoms	Causes serious eye irritation. May cause severe eye irritation and pain associated with redness and swelling of the conjunctiva. Causes skin irritation. May cause an allergic skin reaction. May cause nose, throat, and lung irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause drowsiness or dizziness. Overexposure may aggravate pre-existing disorders of the eyes, skin and respiratory system. May cause lung damage.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Foam. Carbon dioxide (CO₂). Water spray (fog). Cool fire exposed containers and structures with water.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Sealed containers may rupture when heated. Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure build-up may rupture them.

Hazardous Combustion Products Toxic gases may be formed by fire.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required.
For Emergency Responders	Evacuate unprotected personnel from area. Ventilate the area.
Environmental Precautions	Dike spill and prevent spill from entering sewers and waterways. See Section 12 for additional Ecological Information. See Section 13, Disposal Considerations, for additional information.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so. A vapor suppressing foam may be used to reduce vapors.
Methods for Clean-Up	For small spills, absorb with sand, clay, or other inert absorbent. Shovel into suitable unsealed containers and transport to a well-ventilated area. Treat with neutralizing solution: mixture of water (80%) with a non-ionic surfactant (20%); or water (90%), concentrated ammonia (3-8%) and detergent (2%). Add about 10 parts neutralizer per part of spilled product with mixing. Allow to stand for 48 hours to let CO ₂ escape. Larger quantities: remove mechanically (by pumping). Decontaminate floor with decontamination solution letting stand for at least 15 minutes.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Follow all product label instructions. Use only as directed.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep away from heat, sparks, and flame. Keep away from oxidizing agents.
Incompatible Materials	Oxidizing agents. Water. Amines. Strong bases. Alcohols. Copper alloys. Aluminum.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	TWA: 0.005 ppm	(vacated) Ceiling: 0.02 ppm regulated under Methylene bisphenyl isocyanate (vacated) Ceiling: 0.2 mg/m ³ regulated under Methylene bisphenyl isocyanate Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³	IDLH: 75 mg/m ³ Ceiling: 0.020 ppm 10 min Ceiling: 0.2 mg/m ³ 10 min TWA: 0.005 ppm TWA: 0.05 mg/m ³
Methylenediphenyl diisocyanate 26447-40-5	-	Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³	-

Appropriate engineering controls

Engineering Controls	Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses with side shields or chemical goggles.
Skin and Body Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Use a protective cream.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

General Hygiene Considerations Wash contaminated clothing before reuse. Do not eat, drink or smoke while using this product. Wash hands before eating, drinking, smoking or going to the toilet. Take off all contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Faint aromatic odor
Appearance	Pale yellow liquid	Odor Threshold	Not determined
Color	Pale yellow		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	200 °C / 392 °F		
Flash Point	204 °C / 400 °F	Setaflash	
Evaporation Rate	Slower than ether	(Ether = 1)	
Flammability (Solid, Gas)	Liquid-not applicable		
Upper Flammability Limits	Not applicable		
Lower Flammability Limit	Not applicable		
Vapor Pressure	Not determined		
Vapor Density	Heavier than air	(Air=1)	
Specific Gravity	1.13		
Water Solubility	Reacts with water		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		
VOC Content	None		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization may occur. Contact with moisture, other materials that react with isocyanates, or temperatures above 350°F (177°C) may cause polymerization.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Oxidizing agents. Water. Amines. Strong bases. Alcohols. Copper alloys. Aluminum.

Hazardous Decomposition Products

Nitrogen oxides (NOx). Various unidentified organic compounds. Smoke, fumes or vapors, and oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation.
Inhalation	Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Ingestion	Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	= 9200 mg/kg (Rat)	-	-
Methylenediphenyl diisocyanate 26447-40-5	> 7400 mg/kg (Rat)	> 6200 mg/kg (Rabbit)	= 0.369 mg/L (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Sensitization May cause an allergic skin reaction.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested. Suspected of causing cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methylenediphenyl diisocyanate 26447-40-5		Group 3		
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8		Group 3		

*IARC (International Agency for Research on Cancer)
Group 3 IARC components are "not classifiable as human carcinogens"*

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methylenediphenyl diisocyanate 26447-40-5	3230: 96 h Skeletonema costatum mg/L EC50			1000: 24 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Chemical Name	Partition Coefficient
Methylenediphenyl diisocyanate 26447-40-5	4.5

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Please contact manufacturer for most current information

IATA

Please contact manufacturer for most current information

IMDG

Please contact manufacturer for most current information

15. REGULATORY INFORMATION**International Inventories****TSCA**

Listed

Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
4,4- methylenediphenyl diisocyanate (MDI) - 101-68-8	101-68-8	<50	1.0
Methylenediphenyl diisocyanate - 26447-40-5	26447-40-5	<50	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	X		X
Methylenediphenyl diisocyanate 26447-40-5	X	X	

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 3	Flammability 1	Physical Hazards 1	Personal Protection X

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Revision Date: 17-Sep-2013
Revision Note New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet