

SAFETY DATA SHEET

Date Prepared: 5/14/2014

Date Modified: 05/03/2018

Date Printed: 12/13/2020

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MATERIAL IDENTITY:

RockHardscp A.U. Ultra Bond
Catalyst

INFORMATION TELEPHONE:

281-797-0457

COMPANY:

SolidCast Polymer Technology, LLC
5422 Chapel Brook Dr.
Houston, TX 77069

EMERGENCY TELEPHONE:

CHEMTREC: 800-424-9300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA HAZARDOUS

Skin sensitizer, Skin, Eye, Respiratory Irritant, Digestive Tract Irritant

Target Organs: Respiratory, Eyes, Skin, Digestive Tract

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental	Physical
Eye Irritation	Category 2A	Not Classified	Not Classified
Respiratory Sensitization	Category 1		
Skin Sensitization	Category 1		

Pictogram:



Signal Word **Danger**

Hazard Statements	Precautionary Statements
H317 May cause an allergic skin reaction	P261 Avoid breathing dust/fume/gas/mist/vapours/ spray.
H319 Causes serious eye irritation	P264 Wash thoroughly after handling.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled	P272 Contaminated work clothing should not be allowed out of the workplace.
	P280 Wear protective gloves/eye protection/face protection.
	P285 In case of inadequate ventilation wear respiratory protection.
	P302+P352 IF ON SKIN: Wash with plenty of soap and water.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P333 + P313 If skin irritation or rash occurs get medical advice/ attention.
	P337 + P311 If eye irritation persists: Get medical advice/ attention.
	P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
	P363 Wash contaminated clothing before reuse.
	P501 Dispose of containers in accordance with local/regional/national/international requirements.

SAFETY DATA SHEET

Date Prepared: 5/14/2014

Date Modified: 05/03/2018

Date Printed: 12/13/2020

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
Hexane,1,6-diisocyanate, -Homopolymer	28182-81-2	100
Hexamethylene Diisocyanate (HDI)	822-06-0	< 0.5
Titanium Dioxide	13463-67-7	1-50%

4. FIRST AID MEASURES

Eyes Contact: Immediately flush eyes gently with large amounts of water for at least 15 minutes. Retract eyelids often. Get prompt medical attention. Can cause pain, tearing, reddening, and swelling accompanied by a stinging sensation. Chronic exposure can cause corneal opacity.

Skin Contact: Thoroughly wash the exposed area with mild soap and water. Remove contaminated clothing and launder contaminated clothing before re-use. Seek medical attention if exposure symptoms develop.

May be harmful if absorbed through the skin. Symptoms of irritation may be reddening swelling, rash, scaling or blistering. May cause sensitization and allergic reaction.

Ingestion: If victim is conscious and alert, give 2 - 3 glasses of water to drink and induce vomiting by touching the back of the throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than the waist if vomiting occurs and the victim is conscious; give water to further dilute the chemical.

May be harmful if swallowed. Can cause irritation and possible corrosive action to the mouth, stomach tissue and digestive tract.

Inhalation: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention immediately. May cause shortness of breath, headache, nausea, vomiting, respiratory tract irritation.

Advise to physicians: All treatment should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Exposure may aggravate asthma and other respiratory disorders (bronchitis, emphysema, and hyperactivity) skin allergies and eczema.

5. FIRE FIGHTING MEASURES

Conditions of Flammability

Product will burn under fire conditions. Under fire conditions, toxic, corrosive fumes are emitted including nitrogen and carbon oxides. Use water to cool tightly closed containers exposed to fire. Self contained breathing apparatus and full protective clothing is required when smoke or fumes are generated.

Suitable extinguishing media

Dry Chemical, CO₂, Foam, **WATER IS NOT** recommended.

Hazardous Decomposition Products

Thermal decomposition may produce nitrogen oxides and carbon oxides.

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Use water spray/fog for cooling tightly sealed containers. Notify authorities if liquid enters sewer/public waters.

6. ACCIDENTAL RELEASE MEASURES

SAFETY DATA SHEET

Date Prepared: 5/14/2014

Date Modified: 05/03/2018

Date Printed: 12/13/2020

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air. Prevent runoff from entering drains, sewers, or streams. Dispose/report per regulatory requirements. See Section 1 for emergency contact information and Section 13 for waste disposal.

Methods and Materials for Containment and Cleaning Up

Cover spills and soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into disposal container. Pump free liquid into an appropriate closed container. Clean up spill area with a decontamination solution made up of 50% isopropanol, 45% water and 5% concentration ammonia solution (% by Weight). The solution should cover the area for at least one hour. Absorb with an inert absorbent. Collect washing for disposal. Dispose/report per regulatory requirements. **Do not** flush into drains.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Conditions for Safe Storage

This material is stable under normal handling and storage conditions. Maximum storage temperature is < 40 C (104 F). Store in a dry, well ventilated area. Store, transfer and handle under a blanket of nitrogen. Before closing partially empty containers, blanket with dry nitrogen. Replace damaged gaskets.

Store in tightly closed containers. Store in original container. Recommended container material: aluminum, epoxy coated steel, stainless steel, plastic. Container material to avoid, copper, tin.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

HAZARDOUS COMPONENT	PEL	STEL	TLV	Other
Hexane, 1,6-diisocyanate, Homopolymer	-	NE	NE	NE
Hexamethylene Diisocyanate (HDI)	NE	NE	ACGIH 0.005 ppm	NE

Engineering Controls

Local exhaust ventilation may be required in addition to general room ventilation. Good industrial hygiene practice dictates that worker protection be achieved through ventilation whenever feasible.

Respiratory Protections

Where respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations. Full-face air purifying respirators are required in work environments where isocyanate airborne concentrations exceed the action level but are significantly lower than the IDLH provided that the cartridges are changed daily. Use combination HEPA Filter for the polyisocyanate aerosol and an organic vapor cartridge for the solvents used. Full face supplied air respirators (SAR) are required in work environments where isocyanate airborne concentrations have not been characterized or are expected to exhibit considerable and sudden variations such as in spray type application. Curing ovens must be ventilated to prevent emissions to the workplace.

SAFETY DATA SHEET

Date Prepared: 5/14/2014

Date Modified: 05/03/2018

Date Printed: 12/13/2020

Eye Protection

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection

When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene, rubber or latex. Clean equipment thoroughly after each use.

Other hygienic practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES

Precautions must be taken so that persons handling this product do not allow contact with eyes or skin. In spray operations protection must be afforded against exposure to both vapor and spray mists.

Use good personal hygiene practices. Do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is being used. Wash hands before eating, drinking, smoking or using toilet facilities. Wash exposed skin promptly to remove accidental splashes or contact with these materials. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	Viscous Liquid
Color	Clear to Pale yellow
pH	Not available
Melting/Freezing Temperature	67 C (152 F)
Boiling Point	255 C (491 F)
Flash Point	170 C/ 338 F
Ignition Temperature	Not available
Autoignition Temperature	454 C (849 F)
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	0.001 mm Hg at 20 C
Vapor Density (air=1)	5.8 Air = 1
Specific Gravity (water=1 @39.2F)	1.13 at 20 C/68F
Evaporation Rate (Bac=1)	Not available
Odor	Odorless
Odor threshold	Not available
VOC	0g/L

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Stable under normal processing conditions.

Conditions to Avoid

Reacts violently with common materials including water, alcohols, bases and amines.

Materials to Avoid

Store away from water, alcohols, bases, and amines.

Hazardous Decomposition Products

Thermal decomposition may produce nitrogen oxides and carbon oxides.

SAFETY DATA SHEET

Date Prepared: 5/14/2014

Date Modified: 05/03/2018

Date Printed: 12/13/2020

11. TOXICOLOGY INFORMATION

Acute Toxicity hexamethylene diisocyanate

Oral LD50 – lethal concentration 50% of test species	Rat	> 5,000 mg/kg
Dermal LD50 – lethal concentration 50% of test species	Rabbit	> 2,000 mg/kg
Inhalation LD50 – lethal concentration 50% of test species	Rat	2.18 mg/l – 4 hr

Skin Corrosion/Irritation

Skin Rabbit Slightly Irritating

Serious Eye Damage/Eye Irritation

Eye Rabbit Mildly Irritating

Respiratory or Skin Sensitization

Skin Guinea Pig Sensitizing

Mutagenicity

No data available

Carcinogenicity

IARC: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicity

No data available

Biodegradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristics definition of ignitability, corrosiveness, or reactivity and is not listed in 40CFR261.33. The toxicity characteristic (TC), has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

SAFETY DATA SHEET

Date Prepared: 5/14/2014

Date Modified: 05/03/2018

Date Printed: 12/13/2020

14. TRANSPORTATION INFORMATION

DOT (US)

Not regulated by DOT

IMDG

Not regulated by IMDG

IATA

Not regulated by IATA

15. REGULATORY INFORMATION

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin Irritant, Skin Sensitizer, Eye Irritant, Respiratory Irritant, Digestive Tract Irritant

	HMIS Classification	NFPA Rating
Health Hazard;	2	2
Flammability	1	1
Physical Hazards	1	1

SARA TITLE III: Section 311/312 Hazard Class

Hexamethylene diisocyanate	CERCLA/SARA RQ 100 lbs
----------------------------	---------------------------

SARA TITLE III: Section 313 (40CFR370)

Hexamethylene diisocyanate	CERCLA/SARA RQ 100 lbs
----------------------------	---------------------------

CERCLA Information (40CFR302.4)

This material contains Hexamethylene diisocyanate and releases in excess of CERCLA thresholds are reportable.

California Proposition 65 Information:

This product does not contain, or may contain substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SAFETY DATA SHEET

Date Prepared: 5/15/2014

Date Modified: 05/02/2018

Date Printed: 12/13/2020

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MATERIAL IDENTITY:

RockHardscp A.U. Ultra-Bond B
Aspartic Ester

INFORMATION TELEPHONE:

281-797-0457

COMPANY:

SolidCast Polymer Technology, LLC
5422 Chapel Brook Dr.
Houston, TX 77069

EMERGENCY TELEPHONE:

CHEMTREC: 800-424-9300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA HAZARDOUS

Skin, Eye and Respiratory Irritant, Skin Sensitizer

Target Organs: Eyes, Skin, Digestive Tract, Respiratory Tract

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental		Physical
Acute Toxicity	Category 5	Acute Aquatic Hazard	Category 3	Not Classified
Skin Irritant	Category 2			
Eye Irritation	Category 2A			
Skin Sensitizer	Category 1			
STOT (Respiratory)	Category 3			

Pictogram:



Signal Word

Warning

Hazard Statements	Precautionary Statements
H315 May be harmful if swallowed	P261 Avoid breathing dust/fume/gas/mist/vapours/ spray.
H315 Causes skin irritation	P264 Wash thoroughly after handling.
H317 May cause an allergic skin reaction	P280 Wear protective gloves/eye protection/face protection.
H319 Causes serious eye irritation	P302+P352 IF ON SKIN: Wash with plenty of soap and water.
H335 May Cause respiratory irritation	P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
H402 Harmful to aquatic life	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312 Call a POISON CENTER or doctor/physician if you feel unwell.
	P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
	P363 Wash contaminated clothing before reuse.
	P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
	P501 Dispose of containers in accordance with local/regional/national/international requirements.

SAFETY DATA SHEET

Date Prepared: 5/15/2014

Date Modified: 05/02/2018

Date Printed: 12/13/2020

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
Aspartic Ester(s)	Proprietary	50 - 70 %
Aliphatic Carboxylic Ester	623-91-6	1 - 5%
Titanium Dioxide	13463-67-7	1 - 50%
Aldimine	54914-37-3	1 - 5%

4. FIRST AID MEASURES

Eyes Contact: Immediately flush eyes gently with large amounts of water for at least 20-30 minutes. Retract eyelids often. Get prompt medical attention. Symptoms of exposure may include pain or burning sensation, redness, swelling, tearing/discharge or blurred vision.

Skin Contact: Thoroughly wash the exposed area with mild soap and water. Remove contaminated clothing and launder contaminated clothing before re-use. Seek medical attention if exposure symptoms develop.

Symptoms may include irritation with reddening and itching. Repeated exposure may cause allergic skin reaction and sensitization of susceptible persons.

Ingestion: If large quantity is swallowed, give lukewarm water (2 cups) if victim is completely conscious/alert. Do not induce vomiting as risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

Inhalation: Inhalation is unlikely due to low vapor pressure. If misted or handled at elevated temperatures, high concentrations may cause respiratory tract irritation. If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

Advise to physicians: If exposed, treat skin and eye burns or irritation conventionally after decontamination. This material or its emissions may induce an allergic or sensitization reaction and thereby aggravate systemic disease.

5. FIRE FIGHTING MEASURES

Conditions of Flammability

At higher temperatures vapors can cause pressure build up in sealed containers. Use water to cool containers exposed to fire.

Suitable extinguishing media

Dry Chemical, CO₂, Foam, Water spray/water fog for cooling.

Hazardous Decomposition Products

Fire and thermal decomposition can produce carbon oxides, nitrogen oxides (NO_x) amines and other aliphatic fragments which have not been determined. Ammonia may be liberated at high temperatures.

Fire Fighting Instructions

Do not enter fire area without proper protection. Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent. See Section 10 - decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray/fog for cooling. Notify authorities if liquid enters sewer/public waters.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

SAFETY DATA SHEET

Date Prepared: 5/15/2014

Date Modified: 05/02/2018

Date Printed: 12/13/2020

Environmental Precautions

Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Notify authorities of any releases to sewers, soils, waterways or air.

Methods and Materials for Containment and Cleaning Up

Extinguish all ignition sources and ventilate area. Wear protective equipment during clean up. Cover spills and soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into vented disposal container. Wash spill area with a strong detergent and water solution; rinse with water but minimize water use during clean up. For spills on water, contain, minimize dispersion and collect. Dispose/report per regulatory requirements. Evacuate and keep unnecessary people out of the spill area. See Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Conditions for Safe Storage

Keep container closed when not in use. Store in a dry place away from excessive heat. The material can be stored safely at ambient temperatures. Minimum storage temperature 32 F (0 C) Maximum storage temperature 104 F (40 C). Material is hygroscopic and may absorb small amounts of atmospheric moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

HAZARDOUS COMPONENT	PEL	STEL	TLV	Other
Aspartic Ester (s)	NE	NE	NE	NE
Aliphatic Carboxylic Ester	NE	NE	NE	NE
Propylene Carbonate	NE	NE	NE	NE
Aldimine	NE	NE	NE	NE

Engineering Controls

Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

Respiratory Protections

No respiratory protection is recommended for working with this material. However if conditions such as in a spray application create a high vapor or mist concentration, use of a NIOSH/MSHA organic vapor/particulate approved respirator or supplied air is recommended.

Eye Protection

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection

When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. Gloves should be impervious neoprene, rubber or latex. Clean equipment thoroughly after each use.

Other hygienic practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

SAFETY DATA SHEET

Date Prepared: 5/15/2014

Date Modified: 05/02/2018

Date Printed: 12/13/2020

OTHER WORK PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Form	Viscous Liquid
Color	Light Gray
pH	Not available
Melting/Freezing Temperature	< -20 C (<4 F)
Boiling Point	185C/365F @ 1.0133mbar)
Flash Point	> 93.3 C/200 F
Ignition Temperature	Not available
Autoignition Temperature	N/AP
Lower explosive limit; na	Upper explosive limit: na
Vapor Pressure	0.000014 mm Hg
Vapor Density (air=1)	>1
Specific Gravity (water=1 @39.2F)	AP 1.22 at 25 C/77F
Evaporation Rate (Bac=1)	None
Odor	Mild amine odor
Odor threshold	Not available
VOC	0g/L

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Avoid extreme heat.

Materials to Avoid

Avoid contact with oxidizing agents.

Hazardous Decomposition Products

Fire and thermal decomposition can produce carbon oxides, nitrogen oxides (NO_x) amines and other aliphatic fragments which have not been determined. Ammonia may be liberated at high temperatures.

11. TOXICOLOGY INFORMATION

Toxicity Data Based on DESMOPHEN NH 1520

Acute Toxicity

Oral LD50	Rat	> 200 mg/kg
Dermal LD50	Rat	> 2,000 mg/kg
Inhalation LC50	Rat	> 4,224 mg/m ³

Skin Corrosion/Irritation

Skin	Rabbit	Moderate skin Irritant
------	--------	------------------------

SAFETY DATA SHEET

Date Prepared: 5/15/2014

Date Modified: 05/02/2018

Date Printed: 12/13/2020

Serious Eye Damage/Eye Irritation

Eye Rabbit Non-irritating

Respiratory or Skin Sensitization

Dermal Guinea Pig Sensitizer

Mutagenicity

Genetic Toxicity in Vitro:
Ames test: negative (Salmonella typhimurium)

Toxicity Data Based on Aspartic Ester

Acute Toxicity

Oral LD50	Rat	> 2,000 mg/kg
Dermal LD50	Rat	> 2,000 mg/kg
Inhalation LC50	Rat	4,224 mg/m ³

Skin Corrosion/Irritation

Skin Rabbit Moderate skin Irritant

Serious Eye Damage/Eye Irritation

Eye Rabbit Non-irritating

Respiratory or Skin Sensitization

Dermal Guinea Pig Sensitizer

Mutagenicity

Genetic Toxicity in Vitro:
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Toxicity Data Based on Aliphatic Carboxylic Ester

Acute Toxicity

Oral LD50	Rat	1,780 mg/kg
-----------	-----	-------------

Carcinogenicity

IARC: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: During normal processing, no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicity Desmophen NH1520

Toxicity to fish	LC50 Brachydanio rerio (Zebra fish) 66 mg/l – 96 h
Toxicity to aquatic invertebrates	EC50 Daphnia magna (water flea) 88.6 mg/l – 48 h
Toxicity to algae	EC50 Scenedemus subspicatus (Green Algae) 113 mg/l – 72 h
Toxicity to bacteria	EC50 3,000 mg/l

Biodegradability

13% Not readily biodegradable. Aerobic exposure time 28 d

SAFETY DATA SHEET

Date Prepared: 5/15/2014

Date Modified: 05/02/2018

Date Printed: 12/13/2020

Bioaccumulative potential

No data available

Mobility in soil

No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristics definition of ignitability, corrosiveness, or reactivity and is not listed in 40CFR261.33. The toxicity characteristic (TC), has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

14. TRANSPORTATION INFORMATION

DOT (US)

Not regulated by DOT

IMDG

Not regulated by IMDG

IATA

Not regulated by IATA

15. REGULATORY INFORMATION

TSCA INVENTORY STATUS

All components are listed or exempt

OSHA HAZARDS

Skin, Eye and Respiratory Irritant, Skin Sensitizer

	HMIS Classification	NFPA Rating
Health Hazard;	2	2
Flammability	1	1
Physical Hazards	0	0

SARA TITLE III: Section 311/312 Hazard Class

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product does not contain, or may contain substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or

SAFETY DATA SHEET

Date Prepared: 5/15/2014

Date Modified: 05/02/2018

Date Printed: 12/13/2020

methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).