SAFETY DATA SHEET

03/29/2021 PremARC® Aliphatic 80 Urethane Binder

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING <u>Product identifier</u>

Product name:

PremARC® Aliphatic 80 Urethane Binder

Details of the supplier of the safety data sheet

Supplier: American Recycling Center, Inc. 655 Wabassee Drive Owosso, MI 48867

Emergency telephone number

24-Hour Emergency Phone number – 800-424-9300 Customer Information Center: 989-725-5100

SECTION 2: HAZARDS IDENTIFICATION GHS CLASSIFICATIONS & HAZARD STATEMENTS:

Acute toxicity (Inhalation):	Category 2	Fatal if inhaled.
Skin irritation:	Category 2	Causes skin irritation.
Eye Damage:	Category2A	Causes serious eye irritation.
Respiratory sensitization:	Category 1	May cause allergy or asthma symptoms or breathing
	Category 1	difficulties if inhaled.
Skin sensitization:	Category 1	May cause allergic skin reaction.
Specific target organ toxicity - single	Category 1	Causes damage to organs.
exposure:		
Specific target organ toxicity-		
repeated exposure:	Category 1	Causes damage to organs through prolonged or repeated
		exposure.
Germ cell mutagenicity:	Category 2	Suspected of causing genetic defects.
Reproductive Toxicity:	Category 1B	May damage fertility or the unborn child.

Precautions:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust/gas/ mist/vapors/sprays. In case of inadequate ventilation or exposures over the limit, wear respiratory protection. IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a doctor. IF ON SKIN: Wash with plenty of water and soap very soon after exposure. A polyglycol-based skin cleanser or corn oil may be more effective than soap and water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash with plenty of water and soap thoroughly after handling. Do not eat, drink, or smoke during work.

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents and container in accordance with all federal, state, and local regulations.

DANGER!





This product is a **"Hazardous Chemical"** as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	
CAS	CONCENTRATION (%)
NUMBER	
DI 5124-30-1	< 5 %
77-57-7	< 2.0 %
acate 41556-26-7	< 10 %
acate 82919-37-7	< 1.0 %
OTHER INGREDIENTS	
	DI 5124-30-1 77-57-7 acate 41556-26-7 acate 82919-37-7

Isocyanate prepolymer

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Acute:

Isocyanate vapors or mist at concentrations above the exposure limits or guidelines can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) with symptoms of runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing difficulty). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the exposure limits or guidelines with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

< 90 %

May cause skin irritation with symptoms of reddening, itching, and swelling. Can cause sensitization. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove.

May cause eye irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.

May cause irritation of the digestive tract; Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

Delayed:

Symptoms affecting the respiratory tract can also occur several hours after overexposure.

Eye Contact:

Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Get medical attention immediately. Suitable emergency eye wash facility should be immediately available.

Skin Contact:

Immediately remove contaminated clothing and shoes. Remove material from skin immediately by washing with soap and plenty of water. Seek medical attention if irritation persists. Wash clothing before reuse. A polyglycol-based skin cleanser or corn oil may be more effective than soap and water. This may also apply to other isocyanates. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.

Inhalation:

Move person to fresh air, away from further exposure. Extreme asthmatic reactions that may occur in sensitized persons can be life threatening. Get medical attention immediately. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Call a physician or transport to a medical facility.

Ingestion:

Do NOT induce vomiting. Rinse mouth and then drink plenty of water. Do not give anything by mouth unless the person is fully conscious. Get medical attention.

Note to physician:

Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

SECTION 5: FIREFIGHTING MEASURES

EXTINGUISHING EQUIPMENT and MEDIA:

Dry chemical, Carbon dioxide (CO2), Foam, water spray for large fires.

Extinguishing Media to Avoid:

Do not use direct water stream. May spread fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Firefighters should wear NFPA compliant structural firefighting protective equipment, including self-contained breathing apparatus and NFPA compliant helmet, hood, boots and gloves. Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Exposure to heated diisocyanate can be extremely dangerous.

Hazardous Decomposition Products:

By Fire and High Heat: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke., Isocyanate, Isocyanic Acid, Other undetermined compounds

Unusual Fire/Explosion Hazards:

Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO2 formed). Use cold-water spray to cool fire-exposed containers to minimize the risk of rupture. Large fires can be extinguished with large volumes of water applied from a safe distance, since reaction between water and hot diisocyanate can be vigorous.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment. Control the source of the leak. Contain the released material by damming, diking, retaining, or diverting into an appropriate containment area. Absorb or pump off as much of the spilled material as possible.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up:

For small amounts:

Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). When using absorbent, completely cover the spill area with suitable absorbent material (e.g., vermiculite, kitty litter, Oil-Dri®, etc...). Allow for the absorbent material to absorb the spilled liquid. Shovel the absorbent material into an approved metal container (i.e., 55-gallon salvage drum). Do not fill the container more than 2/3 full to allow for expansion, and do NOT tighten the lid on the container. Repeat application of absorbent material until all liquid has been removed from the surface. Do NOT make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

For large amounts:

If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues:

The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 15 minutes.

Additional Neutralization solutions:

Colorimetric Laboratories Inc. (CLI)- Isocyanate Decontamination Solution.

ZEP® Commercial Heavy-Duty Floor Stripper

Mix equal amounts of the following:

A 50-50 mixture of water and monoethanolamine

Mineral Spirits (80%), VM&P Naphtha (15%), and household detergent (5%)

Note: Always wear proper PPE when cleaning up an isocyanate spill and using a neutralization solution.

SECTION 7: HANDLING AND STORAGE

Storage:	
STORAGE TEMPERATURE:	50 °F (15 °C) - 95 °F (35 °C)
SHELF LIFE:	1 year
SPECIAL SENSITIVITY:	No explosion proofing necessary. Substances to avoid include water, amines, strong
	bases, alcohols, copper alloys.

HANDLING/STORAGE PRECAUTIONS:

Do not breathe vapors, mists, or dusts. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or spray mist. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash thoroughly after handling. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritating. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits INGREDIENT	CAS #	US. ACGIH Threshold Limit Values: Time Weighted Average
Dicyclohexylmethane-4,4'-Diisocyanate	5124-30-1	(TWA): 0.005 ppm
Tin Compounds, Organic (as Tin)	77-58-7	OSHA PEL: (TWA) 0.10 mg/m3

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

ENGINEERING CONTROLS:

Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations to maintain levels below the TLV whenever this diisocyanate is heated, sprayed, or aerosolized. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. The odor and irritancy of this material are inadequate to warn of excessive exposure.

RESPIRATORY PROTECTION:

When workers are facing concentrations above the occupational exposure limits, they must use appropriate certified respirators. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place. The recommended APR cartridge is an organic vapor/particulate filter combination cartridge (OV/P100). For emergency or non-routine, high exposure situations, including confined space entry, use a NIOSH-certified full-face piece pressure demand self-contained breathing apparatus (SCBA) or a full-face piece pressure demand supplied-air respirator (SAR) with escape provisions.

General safety and hygiene measures:

Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL or TLV value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

EYE PROTECTION:

When directly handling liquid product, eye protection is required. Examples of eye protection include chemical safety goggles or chemical safety goggles in combination with a full-face shield when there is a greater risk of splash.

SKIN PROTECTION:

Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact. Animal tests and other research indicate that skin contact with isocyanates can

play a role in causing sensitization and respiratory reaction. Gloves should be worn, Nitrile rubber showed excellent resistance. Butyl rubber, neoprene and PVC are also effective.

ADDITIONAL PROTECTION:

Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of this product. Follow all label instructions.

Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Note:

Workers who have a history of adult asthma should be restricted from work with isocyanates. A history of eczema or respiratory allergies such as hay fever, are possible reasons for medical exclusion from isocyanate areas. Workers with a history of prior isocyanate sensitization should be excluded from further work with isocyanates. Once a worker has been diagnosed as sensitized to any isocyanate, no further exposure can be permitted.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

d	nce	
	Physical State	Liquid
	Color	Yellow
	Odor	Musty
	Odor Threshold	Not Established
	Vapor Density	Not Established
	pH	Not Applicable
	Relative Density	1.09-1.10g/cm ³ @25°C (77°F) Estimated
	(Specific Gravity)	
	Freezing Point	No Test Data Available
	Solubility(ies):	Insoluble-Reacts slowly with water to liberate CO ₂ gas
	Boiling Point	392 °F (200 °C) <i>@5 mmHg Decomposes</i>
	Flash Point	>392. °F (200 °C)
	Evaporation Rate	No Test Data Available
	Flammability	Not Flammable
	(Solid, Gas)	
	Vapor Pressure	0.000015 mmHg (25°C)
	Partition Coefficient	
	N-octanol/water	Reacts with water
	Auto-ignition	
	Temperature	Not Self-Igniting
	Decomposition	
	Temperature	Not Established
	Viscosity	2,750-3,750 cPs (25°C)

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Contact with moisture, other materials that react with isocyanates, or temperatures above 350°F (177°C), may cause polymerization. Materials to avoid: Water, Amines, Strong bases, Alcohols, Metal compounds, strong oxidizers. Avoid moisture. Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.

Avoid unintended contact with polyols.

CHEMICAL STABILITY:

This product is chemically stable under recommended storage conditions.

OTHER:

Hazardous decomposition products:

Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. By Fire and High Heat: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke., Isocyanate, Isocyanic Acid, other undetermined compounds

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:

Skin Contact Inhalation Eye Contact

Health Effects and Symptoms

Acute:

Isocyanate vapors or mist at concentrations above the exposure limits or guidelines can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) with symptoms of runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing difficulty). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the exposure limits or guidelines with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

May cause skin irritation with symptoms of reddening, itching, and swelling. Can cause sensitization. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove.

May cause eye irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.

May cause irritation of the digestive tract; Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

Chronic:

As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization to isocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to isocyanates at levels well below the exposure limits or guidelines. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Sensitization can be permanent.

Prolonged contact with skin can cause reddening, swelling, rash, and, in some cases, skin sensitization. Animal tests and other research indicate that skin contact with isocyanates can play a role in causing isocyanate sensitization and respiratory reaction. This data reinforces the need to prevent direct skin contact with isocyanates.

Prolonged vapor contact with the eyes may cause conjunctivitis.

Delayed:

Symptoms affecting the respiratory tract can also occur several hours after overexposure.

Toxicity Data for Dicyclohexylmethane-4,4'-Diisocyanate HMDI)

Acute Oral Toxicity

LD50: 18200 mg/kg (rat, male/female)

Acute Inhalation Toxicity

LC50: 0.434 mg/l, 4 h (rat, male/female) (OECD Test Guideline 403)

Acute Dermal Toxicity

LD50: > 7000 mg/kg (rat, male/female) (OECD Test Guideline 402)

- Acute Inhalation Toxicity
 - LC50: 0.434 mg/l, 4 h (rat, male/female) (OECD Test Guideline 403)

Skin Irritation

rabbit, OECD Test Guideline 404, irritating

Eye Irritation

rabbit, OECD Test Guideline 405, slight irritant

Sensitization

inhalation: sensitizer (Guinea pig)

dermal: sensitizer (mouse, Mouse ear swelling test)

Skin sensitization according to Magnusson/Kligmann (maximizing test): positive (guinea pig, OECD Test Guideline 406)

dermal: sensitizer (Human)

Repeated Dose Toxicity

13 w, Inhalative: NOAEL: 3 mg/m3, (rat, male/female, 6 hours a day, 5 days a week)

Evidence of damage to organs other than the organs of respiration was not found.

Mutagenicity /Genetic Toxicity in Vitro:

Salmonella/microsome test (Ames test): No indication of mutagenic effects. (Metabolic Activation: with/without)

In vitro mammalian cell gene mutation test: negative (Chinese hamster V79 cell line, Metabolic Activation: with/without)

Chromosome aberration test in vitro: negative (Chinese hamster V79 cell line, Metabolic Activation: with/without) Toxicity to Reproduction/Fertility

Inhalative, 6 hours/day 7 days/week, (rat, male/female) NOAEL (parental): 1 mg/m³, Developmental Toxicity/Teratogenicity

rat, female, Inhalative, 6 hours/day 7 days/week, NOAEL (teratogenicity): 6 mg/m³, NOAEL (maternal): 1 mg/m³ Did not show teratogenic effects in animal experiments.

Carcinogenicity:

No carcinogenic substances as defined by IARC, NTP and/or OSHA

SECTION 12: ECOLOGICAL INFORMATION

Data is based on the Ecological Data for Dicyclohexylmethane-4,4'-Diisocyanate (HMDI) Biodegradation

aerobic, 0 %, Exposure time: 28 Days, Not readily biodegradable.

Theoretical Biological Oxygen Demand (ThBOD)

2,195 mg/g

Acute and Prolonged Toxicity to Fish

LC50: 1.2 mg/l (Zebra fish (Brachydanio rerio), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC0: > 8.3 mg/l (Water flea (Daphnia magna), 48 h)

Toxicity to Aquatic Plants

EC50: > 5 mg/l, End Point: growth (Green algae (Scenedesmus subspicatus), 72 h)

Toxicity to Microorganisms

EC50: 19 mg/l, (Activated sludge microorganisms, 3 h)

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

EMPTY CONTAINER PRECAUTIONS:

Empty containers retain product residue; observe all precautions for product. Do not heat or cut empty container with electric or gas torch because highly toxic vapors and gases are formed. Do not reuse without thorough commercial cleaning and reconditioning. If container is to be disposed, ensure all product residues are removed prior to disposal.

SECTION 14: TRANSPORT INFORMATION

TRANSPORTATION EMERGENCIES:

Contact should be made with CHEMTREC (800-424-9300) when this product is unintentionally released from its container during its course of distribution, regardless of the amount released. Distribution includes transportation, storage incidental to transportation, loading and unloading. Such notification must be immediate and made by the person having knowledge of the release.

LAND Transport USDOT:	Non-Regulated	
OCEAN Transport IMO / IMDG CODE:	Non-Regulated	
AIR Transport IATA:	UN3334	
UN NUMBER:	Aviation regulated liquid, n.o.s. (contains	
UN PROPER SHIPPING NAME:	Dicyclohexylmethane-4,4'-Diisocyanate)	
HAZARD CLASS(ES) / LABEL:	Class 9, Miscellaneous	
PACKAGING GROUP:	III	
REPORTABLE QUANTITY (RQ):	Dicyclohexylmethane-4,4'-Diisocyanate - 5000	
	lb (2270 kg)	
*Additional DOT Transportation Information: (reference 49 CFR 172.101 Appendix A)		
When in individual containers of more than the Product RQ, this material ships as Regulated as follows:		
UN NUMBER:	NA3082	
UN PROPER SHIPPING NAME:	Other Regulated Substance, Liquid, N.O.S. (contains	
	Dicyclohexylmethane-4,4'-Diisocyanate)	
HAZARD CLASS(ES) / LABEL:	Class 9	
PACKAGING GROUP:	III	

AMERICAN RECYCLING CENTER, INC. 655 WABASSEE DRIVE OWOSSO, MI 48867 PHONE – 989-725-5100

Dicyclohexylmethane-4,4'-Diisocyanate 5 000 lbs (2270 kg)

Dicyclohexylmethane-4,4'-Diisocyanate CAS#5124-30-1

SECTION 15: REGULATORY INFORMATION

OSHA Hazcom Standard Rating: US. Toxic Substances Control Act: CERCLA Reportable Quantity (RQ):

US. EPA CERCLA Hazardous Substances (40 CFR 302):

SARA Section 311/312 Hazard Categories: SARA Title III Section 302 Extremely Hazardous Substance SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65)-Supplier Notification

State Right-To-Know Information:

For details on your regulatory requirements you should contact the appropriate agency in your state.Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:INGREDIENTCAS NUMBERCONCENTRATION (%)Dicyclohexylmethane-4,4'-Diisocyanate (HMDI)5124-30-1< 5.0 %</td>

California Prop. 65:

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any Specific product features and shall not establish a legally valid contractual relationship.

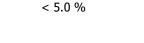
American Recycling Center urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date of the SDS. However, no warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that its activities comply with all applicable federal, state, provincial and local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of American Recycling Center, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Due to the proliferation of sources for information such as manufacturer-specific SDSs, American Recycling Center, Inc. is not and cannot be responsible for SDSs obtained from any source other than American Recycling Center, Inc. If you have obtained an American Recycling Center, Inc. SDS from a non-American Recycling Center, Inc. source or if you are not sure that the SDS is current, please contact American Recycling Center, Inc. for the most current version.

Department issuing M(M)SDS:American Recycling Center, Inc.Contact:Customer Service 989-725-5100





Listed on the TSCA Inventory.

Hazardous

none

Components none

Components(s):

Acute Health Hazard