SAFETY DATA SHEET

03/29/2021 PremARC® 80-100 Urethane Binder (Aromatic)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier Product name:

Material Type:

PremARC® 80-100 Urethane Binder Isocyanate

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

<u>Classification of the substance or mixture</u> Skin Irrit. 2 Causes skin irritation. Resp. Sens. 1 May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin Sens. 1 May cause an allergic skin reaction. Carc. 2 Suspected of causing cancer. STOT SE 3 May cause respiratory irritation. STOT RE 2 May cause damage to organs through prolonged or repeated exposure.

GHS label elements Hazard pictograms



Signal word : Danger

Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H351.1 Suspected of causing cancer.

H373.2 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash ... Thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P312 Call a POISON CENTER/doctor/... if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501.A Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

OSHA/HCS status:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture

N/A

Mixtures:

Ingredient name	%	CAS number
4,4'-methylenediphenyl diisocyanate;	10 - 15	CAS:101-68-8, 101-68-8
diphenylmethane-4,4'-diisocyanate;		EC:202-966-0 Index:615-005-00-9
PROPYLENE CARBONATE	1 - 5	CAS:108-32-7

SECTION 4: FIRST AID MEASURES

Description of necessary first aid measures

Description of first aid measures

In case of skin contact:

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

In case of eye contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

In case of Ingestion:

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

In case of Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.

Most important symptoms/effects, acute and delayed

Eye irritation Eye damages Skin Irritation Erythema

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire. Suitable extinguishing media: Water. Carbon dioxide (CO2). Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst. Hazardous thermal decomposition products

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: carbon dioxide carbon monoxide nitrogen oxides hydrogen cyanide

isocyanate vapor Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken

involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and

self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Fire-fighters should wear positive pressure self-contained breathing apparatus and personal protective equipment, such as jacket (standard:

EN469), helmet (standard: EN443), gloves (standard: EN407), boots (standard: EN345-S3 HI WRU HRO).

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapors/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorb with inert, absorbent material. In case of heavy spills: wash with plenty of water.

SECTION 7: HANDLING AND STORAGE

Store in accordance with local regulations.

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapors and mists. Exercise the greatest care when handling or opening the container. Do not use on extensive surface areas in premises where there are occupants. Use localized ventilation system. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contaminated clothing should be changed before entering eating areas. Do not eat or drink or smoke while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Always keep in a well ventilated place. Incompatible materials: See Section 10. Instructions as regards storage premises:

Cool, dry and adequately ventilated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters					
Component	OEL	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short
Term ppm				_	
4,4'-methylenediphenyl	ACGIH		.005		
diisocyanate; diphenylmethane-4,					
4'-diisocyanate;					
	OSHA	.200	.020		
	NIOSH	.020	.020	.005	.005

Appropriate engineering controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. Handle in accordance with good industrial hygiene and safety practice.

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber (EN374).

Respiratory protection:

Use adequate protective respiratory equipment (EN529).

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties General Information

Information on basic physical and chemical properties

Physical State:	Liquid		
Appearance and color:	Viscous amber		
Odor: like:	Isocyanate		
Odor threshold:	N.A.		
pH:	N.A.		
Melting point /			
freezing point:	N.A.		
Initial boiling			
point and boiling range:	N.A.		
Flash point:	150.0 °C (302.0 °F)		
Evaporation rate: N.A.			
Upper/lower flammability			
or explosive limits:	N.A.		
Vapour density (air = 1): N.A	.		
Vapour pressure: N.A.			
Density: 1.09 REL			
Solubility in water: Reacts			
Solubility in oil:	N.A.		
Partition coefficient			
(n-octanol/water):	N.A.		
Auto-ignition temperature: N.			
Decomposition temperature: I			
Viscosity: 3,500.00			
Explosive properties:	N.A.		
Oxidizing properties:	N.A.		
Solid/gas flammability:	N.A.		
Other information			
Substance Groups	NI 4		
relevant properties	N.A.		
Miscibility:	N.A.		
Fat Solubility:	N.A.		
Conductivity:	N.A.		
SECTION 10: STABILITY AND REACTIVITY Reactivity Stable under normal conditions.			

Reacti Chemical stability

Data not Available.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

Alcohols; Oxidizers; Water

Hazardous decomposition products

In case of fire, toxic gases (such as carbon dioxide, carbon monoxide, nitrogen oxides) may be formed. Hydrogen cyanide (HCN) **SECTION 11: TOXICOLOGICAL INFORMATION**

Information on toxicological effects

Toxicological Information of the Mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4, 4'-diisocyanate;	a)Acute toxicity	LD50 Oral Rat 9200 mg/kg
PROPYLENE CARBONATE	a)skin corrosion/ irritation b)serious eve damage/irritation	Skin Irritant Rabbit No Eve Irritant Rabbit Yes
	c)acute toxicity	LD50 Oral Rat > 5000.00000 g/kg
		LD50 Skin Rabbit > 2000.00000 mg/kg

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitization

e) germ cell mutagenicity

f) carcinogenicity

q) reproductive toxicity

h) STOT-single exposure

i) STOT-repeated exposure

i) aspiration hazard

Substance(s) listed on the IARC Monographs:

4,4'-methylenediphenyl	Group 3
diisocyanate;	
diphenylmethane-4,4'-diisocyanate;	

Substance(s) listed as OSHA Carcinogen(s): 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; Substance(s) listed as NIOSH Carcinogen(s): None

Substance(s) listed on the NTP report on Carcinogens:

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate;

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Component Ident.	. Nu	mb. Ecotox Infos
PROPYLENE CARBONATE	CAS: 108-32-	b) Aquatic chronic toxicity : LC50 Fish Cyprinus carpio (Carp) > 1000.00000 mg/L 96h
	7	a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna (Water flea) > 1000.00000 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus (green algae) > 900.00000 mg/L
		72h
		c) Bacteria toxicity : EC10 Pseudomonas putida 7400.00000 mg/L - 16 hr

Persistence and degradability

Component Persitence/Degradability: Value

PROPYLENE CARBONATE Readily biodegradable 90.000
Bioaccumulative potential N/A

Mobility in soilN/AOther adverse effectsN/A

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Recover, if possible. Send to authorized disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

UN number

ADR-UN number: N/A DOT-UN Number: N/A IATA-Un number: N/A IMDG-Un number: N/A UN proper shipping name ADR-Shipping Name: N/A DOT Proper Shipping Name: N/A IATA-Technical name: N/A IMDG-Technical name: N/A Transport hazard class(es) ADR-Class: N/A DOT Hazard Class: N/A IATA-Class: N/A IMDG-Class: N/A Packing group ADR-Packing Group: N/A DOT-Packing group: N/A IATA-Packing group: N/A IMDG-Packing group: N/A **Environmental hazards** Marine pollutant: No Environmental Pollutant: N.A. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N.A. Special precautions Department of Transportation (DOT): DOT-Special Provision(s): N/A DOT Label(s): N/A DOT Symbol: N/A DOT Cargo Aircraft: N/A DOT Passenger Aircraft: N/A DOT Bulk: N/A DOT Non-Bulk: N/A Road and Rail (ADR-RID): ADR-Label: N/A ADR - Hazard identification number: N/A ADR-Transport category (Tunnel restriction code): N/A Air (IATA): IATA-Passenger Aircraft: N/A IATA-Cargo Aircraft: N/A IATA-Label: N/A IATA-Subrisk: N/A IATA-Era: N/A IATA-Special Provisions: N/A Sea (IMDG): IMDG-Stowage Code: N/A IMDG-Stowage Note: N/A IMDG-Subrisk: N/A IMDG-Special Provisions: N/A IMDG-Page: N/A IMDG-Label: N/A IMDG-EMS: N/A IMDG-MFAG: N/A

SECTION 15: REGULATORY INFORMATION USA - Federal regulations TSCA - Toxic Substances Control Act			
TSCA inventory:			
All the components are listed or exe	mpted on the ISCA inventory		
TSCA listed substances:	: diphenylmethane-4.4'-diisocvanate: is listed in TSCA Section 8b		
PROPYLENE CARBONATE	e; diphenylmethane-4,4'-diisocyanate; is listed in TSCA Section 8b is listed in TSCA Section 8b		
SARA - Superfund Amendments and Rea			
Section 302 - Extremely Hazard			
Section 304 - Hazardous substa			
Section 313 - Toxic chemical list	t: 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate;		
Substance(s) listed under CERC CAA - Clean Air Act CAA listed substances: CWA - Clean Water Act CWA listed substances: USA - State specific regulations California Proposition 65 Substance(s) listed under Califor Massachusetts Right to know Substance(s) listed under Massa 4,4'-methylenediphenyl di Pennsylvania Right to know Substance(s) listed under Penns 4,4'-methylenediphenyl di PROPYLENE CARBONATE New Jersey Right to know	no substances listed no substances listed ornia Proposition 65: no substances listed achusetts Right to know: isocyanate; diphenylmethane-4,4'-diisocyanate; sylvania Right to know: isocyanate; diphenylmethane-4,4'-diisocyanate; Dersey Right to know:		
4,4'-methylenediphenyl di PROPYLENE CARBONATE	isocyanate; diphenylmethane-4,4'-diisocyanate;		

SECTION 16: OTHER INFORMATION

Hazardous Material Information System (U.S.A.)



HMIS Health: 2 = MODERATE HMIS Flammability: 1 = Combustible if heated HMIS Reactivity: 1 = SLIGHT HMIS P.P.E.: G - Safety glasses, gloves, vapor respirators NFPA Health: 2 = MODERATENFPA Flammability: 1 = Combustible if heated NFPA Reactivity: 0 = MINIMAL NFPA Special Risk: NONE

Legend to abbreviations and acronyms used in the safety data sheet: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods. IATA: International Air Transport Association. IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO). GHS: Globally Harmonized System of Classification and Labeling of Chemicals. CLP: Classification, Labeling, Packaging.



EINECS: European Inventory of Existing Commercial Chemical Substances. INCI: International Nomenclature of Cosmetic Ingredients. CAS: Chemical Abstracts Service (division of the American Chemical Society). GefStoffVO: Ordinance on Hazardous Substances, Germany. LC50: Lethal dose, for 50 percent of test population. LD50: Lethal dose, for 50 percent of test population. DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration. TLV: Threshold Limiting Value. TWATLV: Threshold Limiting Value. TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard). STEL: Short Term Exposure limit. STOT: Specific Target Organ Toxicity. WGK: German Water Hazard Class. KSt: Explosion coefficient. y for the damage.

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.

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Department issuing SDS: EH&S Delivery Contact: Customer Service: 989-725-5100

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