

SAFETY DATA SHEET

10/26/2017

PremARC™ 80-100 Urethane Binder

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

Product identifier

Product name: PremARC™ 80-100 Urethane Binder
Material Type: 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

Classification of the substance or mixture

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; diphenylmethane-4,4'-diisocyanate;	10 - 15	CAS:101-68-8, 101-68-8 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
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate;	ACGIH		.005		
	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.A.
Decomposition temperature:	N.A.
Viscosity:	3,500.00 cPs
Explosive properties:	N.A.
Oxidizing properties:	N.A.
Solid/gas flammability:	N.A.

Other information

Substance Groups relevant properties	N.A.
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.

SECTION 10: STABILITY AND REACTIVITY

Reactivity Stable under normal conditions.

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 eye damage/irritation c)acute toxicity	Skin Irritant Rabbit No Eye Irritant Rabbit Yes LD50 Oral Rat > 5000.00000g/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
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate;	Group 3
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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.	Numb.	Ecotox Infos
PROPYLENE CARBONATE	CAS: 108-32-7	b) Aquatic chronic toxicity : LC50 Fish Cyprinus carpio (Carp) > 1000.00000 mg/L 96h 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 Persistence/Degradability: Value

PROPYLENE CARBONATE Readily biodegradable 90.000

Bioaccumulative potential N/A

Mobility in soil N/A

Other adverse effects N/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-Erg: 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 exempted on the TSCA inventory

TSCA listed substances:

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; is listed in TSCA Section 8b
 PROPYLENE CARBONATE is listed in TSCA Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances: no substances listed

Section 304 - Hazardous substances: no substances listed

Section 313 - Toxic chemical list: 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate;

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA: no substances listed

CAA - Clean Air Act

CAA listed substances: no substances listed

CWA - Clean Water Act

CWA listed substances: no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65: no substances listed

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

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

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

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

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

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

SECTION 16: OTHER INFORMATION

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



NFPA

HEALTH	2	1
FLAMMABILITY	1	
PHYSICAL HAZARD	1	
PERSONAL PROTECTION	G	

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 = MODERATE

NFPA 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 concentration, 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 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.

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 (M)SDSs, American Recycling Center, Inc. is not and cannot be responsible for (M)SDSs obtained from any source other than American Recycling Center, Inc. If you have obtained an American Recycling Center, Inc (M)(M)SDS from a non American Recycling Center, Inc. source or if you are not sure that the (M)(M)SDS is current, please contact American Recycling Center, Inc. for the most current version.

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

PremARC™ 80-100 Urethane Binder 10/26/2017

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. We warrant that our products will meet our written specifications. Nothing herein shall constitute and other warranty express or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.



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