

#### SAFETY DATA SHEET

#### 10/26/2017

#### PremARC<sup>™</sup> 60-80 Urethane Binder

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

Product IdentifierProduct Name:PremARC™ 60-80 Urethane BinderMaterial Type:IsocyanateProduct Material Weight:45 lbs Pail / 475 lbs Drums

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



GHS08 Health Hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May causes an allergic skin reaction.
- H335 May cause respiratory irritation.

#### Storage:

Keep containers tightly sealed. Store in a cool, dry, ventilated area away from sources of heat or ignition. Store away from direct sunlight.

#### Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Harmful by inhalation, Harmful: danger of serious damage to health by prolonged exposure through inhalation.



Irritating to eyes, respiratory system and skin.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of international guidelines.

Classification system:

Harmful

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

#### Label elements

Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product has been classified and marked in accordance with directives on hazardous materials.

Code letter and hazard designation of product:



Hazard-determining components of labelling:

methylene diphenyl diisocyanate (MDI) Mixed Isomers

Risk phrases:

Harmful by inhalation Irritant to eyes, respiratory system and skin May cause sensation by inhalation and skin contact Harmful: danger of serious damage to health by prolonged exposure through inhalation

Safety phrases:

Keep locked up and out of the reach of children. Do not breathe gas/fumes/vapors/spray (appropriate wording to be specified by the manufacturer). Avoid contact with skin and eyes Wear suitable gloves In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Dispose of this material and its container to hazardous or special waste collection point. In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer.



Reactivity = 1**REACTIVITY** 1

## Other hazards

Results of PBT and vPvB assessment PBT

Not applicable.

vPvB

Not applicable.

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures

Chemical characterization: Mixtures

· Description: Polyurethane Binder

· Dangerous components:			
3164-85-0	methylene diphenyl diisocyanate (MDI) Mixed Isomers	<ul> <li>Resp. Sens. 1, H334;</li> <li>Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1,H317; STOT SE 3, H335</li> </ul>	<25%

# **SECTION 4: FIRST AID MEASURES**

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore, medical observation is required for at least 48 hours after the accident.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek medical treatment in case of complaints.

In case of respiratory failure or breathing irregularities, commence resuscitation or administer oxygen.

In case of unconsciousness, place patient stably in side position for transportation.

After skin contact:

Instantly wash with water and soap and rinse thoroughly. Remove any contaminated clothing. If skin irritation persists, seek medical advice.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Do not induce vomiting; immediately call for medical help.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

# SECTION 5: FIREFIGHTING MEASURES

#### Extinguishing media

Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray For safety reasons unsuitable extinguishing agents:

Water with full jet

Special hazards arising from the substance or mixture

Can be released in case of fire: Nitrogen Oxides (NOx)

Carbon Monoxide (CO)

Hydrogen Cyanide (HCN)

Advice for firefighters

Protective equipment: Wear breathing apparatus

Wear full protective suit with self-contained breathing apparatus

See section 8

Additional information : Dispose of fire debris and contaminated firefighting water in accordance with official regulations.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Protective equipment:

Mount respiratory protective device.

Wear protective equipment.

Keep unprotected persons away.

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Transfer to a waste container. Keep the material damp and exposed to the air in a secure area (CO2-formation!) until completely solidified. The waste can then be disposed of on an approved landfill or a special refuse dump. Ensure adequate ventilation. In the event of a large spill, treat spill area with decontamination solution. Preparation of decontamination solution: Prepare a mixture of 0.2 - 0.5% liquid detergent and 3 - 8% concentrated ammonium hydroxide in water (5 - 10% sodium carbonate may be substituted for the ammonium hydroxide).

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7: HANDLING AND STORAGE

<u>Handling</u>

Precautions for safe handling:

Ensure good ventilation/exhaust at the workplace.

Keep containers tightly sealed.

Prevent formation of aerosols.

Exhaust ventilation required during spraying or when material is being used at temperatures above 100 degrees F.

Information about protection against explosions and fires:

Pay attention to the general rules of internal fire prevention.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Recommended ideal storage temperature range: 59 - 77 degrees F.

Product should not be stored below 40 degrees or above 110 degrees F.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: Keep container tightly sealed.

Specific end use(s) No further relevant information available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

No further data; see item 7.

Control parameters:

Components with limit values that require monitoring at the workplace:	
26447-40-5 methylene diphenyl diisocyanate (MDI) Mixed Isomers	
ACGIH TLV	Short-term value: 0.05 mg/m <sup>3</sup>
NIOSH REL/CEILING	Short-term value: 0.2 mg/m <sup>3</sup>
NIOSH REL/TWA	Short-term value: 0.05 mg/m <sup>3</sup>
OSHA PEL	Short-term value: 0.2 mg/m <sup>3</sup>

Additional information: The lists that were valid during the creation were used as basis.

#### Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Gases fumes and aerosols should not be inhaled.

Breathing equipment:

In case of brief exposure or low pollution, use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.

Hand protection:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

The following glove types are recommended: neoprene, nitrile rubber or butyl rubber. Thin, disposable latex gloves should be avoided for repeated or long term handling of the material. Recommended thickness of the glove material: 5 - 6 mil Selection of the glove material should be based on the consideration of penetration times, rates of diffusion and the degradation

## <sup>•</sup> Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

## <sup>•</sup> Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Eye/Face Protection:



Tightly sealed goggles

Body Protection: Protective work clothing

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties General Information Appearance

Form	Liquid
Color	light to dark amber
Odor	Characteristic

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	Odor Threshold	Not determined
	pH-value	Not determined
Change	in condition:	
	Melting Point	Undetermined
	Boiling Point	Undetermined
	Flash Point Flammability	>200°C (>392°F) Not Applicable
	(solid, gaseous)	Not Applicable
	Ignition Temperature	
	Decomposition Temp.	Not determined
	Auto Igniting	Product does not self-ignite
	Danger of Explosion	Product does not present an explosion hazard
	Explosion Limits: Lower:	Not determined
	Upper:	Not determined
	оррег.	Not determined
	Vapor Pressure	Not determined
	@ 20 °C(68°F)	
	Density	1.09 g.cm <sup>3</sup> (9.096 lbs/gal)
	@20 °C(68°F)	Neb debauerie d
	Relative Density	Not determined Not determined
	Vapor Density Evaporation Rate	Not determined
	Solubility in/ Miscibility	Insoluble, Reacts
	With water	
	Partition Coefficient	Not determined
	(n-octonol/water)	
	Viscosity Dynamic:	6500 mPas
	Kinematic:	Not determined
	Solvent Content	
	Organic Solvents	0.0%
	Solids Content	100.0%
	Other Information	No further relevant information available

# SECTION 10: STABILITY AND REACTIVITY

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions

Exothermic reaction with amines and alcohols

Reacts with water to liberate CO2 gas which may build pressure in closed containers

Conditions to avoid:

No further relevant information available.

Incompatible materials:

No further relevant information available.

Hazardous decomposition products:

By Fire and High Heat: Carbon Monoxide, Carbon Dioxide, Oxides of Nitrogen and traces of HCN.

## SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:		
LD/LC50 values that are relevant for classification:		
26447-40-5 methylene diphenyl diisocyanate (MDI) Mixed Isomers		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)

Inhalative	LC50/4 h	2240 mg/l (rat)

Primary irritant effect:

on the skin:

Irritant to skin and mucous membranes.

on the eye:

Irritating effect.

# Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

#### Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

## Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

## SECTION 12: ECOLOGICAL INFORMATION

<u>Toxicity</u>

Aquatic toxicity:

No further relevant information available. Persistence and degradability No further relevant information available.

#### Behavior in environmental systems:

Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available.

# Additional ecological information:

General notes:

This product is not miscible with water. Reacts with water at the interface producing CO2 gas and forming a solid and insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (eg. detergents) or by water-soluble solvents. Previous experience demonstrates that polyurea is inert and non-degradable. Water hazard class 1 (self-assessment): slightly hazardous for water.

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

# SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation:

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

Empty containers may only be disposed of after neutralizing any product remaining on the walls of the containers with a mixture of isopropanol, ammonia and water and removal of the warning labels. For preparation of decontamination solution, refer to section 6.

## SECTION 14: TRANSPORT INFORMATION

**UN-Number:** 

DOT, ADR, ADN, IMDG, IATA Void UN proper shipping name: DOT, ADR, ADN, IMDG, IATA Void

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Transport hazard class(es):	
DOT, ADR, ADN, IMDG, IATA	
Class	Void
Packing group:	
DOT, ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user:	Not applicable.
Transport in bulk according to Annex II	
of MARPOL73/78and the IBC Code:	Not applicable.
Transport/Additional information:	
DOT	
Hazardous substance:	Single containers less than 5,000 lbs are not regulated. Single containers with 5,000 lbs or more of 4,4' methylene diphenyl diisocyanate are regarded as class 9, NA3082, PG III.
UN "Model Regulation":	-

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# SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances): None of the ingredients is listed. Section 313 (Specific toxic chemical listings): None of the ingredients is listed. TSCA (Toxic Substances Control Act): All ingredients listed Proposition 65 Chemicals known to cause cancer: None of the ingredients is listed. Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed. Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed. Chemicals known to cause developmental toxicity: None of the ingredients is listed. Cancerogenity categories EPA (Environmental Protection Agency) None of the ingredients is listed. TLV (Threshold Limit Value established by ACGIH) None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed.

Product related hazard information's:

Observe the general safety regulations when handling chemicals. The product has been classified and marked in accordance with directives on hazardous materials.

Hazard symbols:

Harmful

Hazard-determining components of labelling: methylene diphenyl diisocyanate (MDI) Mixed Isomers

Risk phrases:

Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Safety phrases:

Keep locked up and out of the reach of children. Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer). Avoid contact with skin and eyes. Wear suitable gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Dispose of this material and its container to hazardous or special waste collection point. In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Special labeling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

# **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.

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

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