

## 1. IDENTIFICATION OF THE SUBSTANCE

## Supplier of the SDS:

Genesis Poly  
2101 E. Murray-Holladay Rd., Suite 100  
Holladay, UT 84117

Office: 801-208-5598

Email: Info@genesispoly.com

Spill, leak, fire, exposure, accident, call Infotrac (24/7)

Infotrac (24/7): 1-800-535-5053

Outside the US: 1-352-323-3500

Medical Emergency: 1-800-535-5053

Email: ECG@genesischemco.com

## 2. GHS HAZARDS IDENTIFICATION

## GHS Ratings:

Carcinogen	2	Limited evidence of human or animal carcinogenicity
Eye Corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 Days
Inhalation Toxicity	Acute Tox. 4	Gases>2500+<=5000ppm, Vapors>10+<=20mg/l, Dusts & Mists>1+<=5mg/l
Organ Toxin – Single Exposure	3	Transient target organ effects – Narcotic effects – Respiratory tract irritation
Organ Toxin – Repeated Exposure	2	Presumed to be harmful to human health – Animal studies with significant toxic effects relevant to humans at generally moderate exposure
Respiratory Sensitizer	1	Respiratory Sensitizer
Skin corrosive	2	Reversible adverse effects in the dermal tissue
Skin Sensitizer	1	Skin Sensitizer

## GHS Hazards:

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma or breathing difficulties if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged exposure

## GHS Warnings:



## GHS Precautions:

P201	Obtain special instruction 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
P261	Avoid breathing dust, fume, gas, mist, vapors, spray
P264	Wash exposed skin thoroughly after handling
P271	Use only outdoors or in well-ventilated areas
P272	Contaminated work clothing should not be allowed out of work area
P280	Wear protective gloves, protective clothing, eye protection, and face protection
P281	Use personal protective equipment as required
P285	In case of inadequate ventilation wear respiratory protection
P302, P352, P304, P340	IF ON SKIN: Wash with soap and water IF INHALED: Remove victim to fresh air and keep in a rest position
P304, P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a comfortable position
P305, P351, P338	IF IN EYES: Rinse continuously with water for several minutes. If present, remove contact lenses if able—continue rinsing
P308, P313	If exposed or concerned, seek medical advice
P312	Call a Poison Center or physician if you feel unwell
P314	Get medical advice or attention if you feel unwell
P321	Specific Treatment (as detailed on label)
P332, P313	If skin irritation occurs, seek medical advice/attention
P333, P313	If skin irritation or rash occurs, seek medical advice/attention
P337, P313	Get medical advice/attention

P342, P311	Call a Poison Center or physician
P362	Take off contaminated clothing and wash 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	Dispose of contents and container in accordance with applicable regional, national, and local regulations

### 3. COMPOSITION / INFORMATION OF INGREDIENTS

Chemical Name	CAS No.	Weight-%	OSHA Exposure Limits	ACGIH Exposure Limits
Poly[oxy(methyl-1,2- ethanediyl)], .alpha.- hydro-.omega.- hydroxy-, polymer with 1,1'- methylenebis[4-isocyanatobenzene]	9048-57-1	60-70	Not Available	Not Available
4,4'-Methylenediphenyl diisocyanate	101-68-8	20-30	PELs – 0.02ppm PELs – 0.2 mg/m <sup>3</sup>	TLV – 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))
Benzene, 1,1'-methylenebis [4-isocyanato-, homopolymer	25686-28-6	5-10	Not Available	Not Available
Propylene carbonate	108-32-7	5-10	Not Available	Not Available
Benzene, 1,1'-methylenebis [isocyanato-	26447-40-5	0.1-1	PELs – 0.02ppm PELs - .2mg/m <sup>3</sup>	Not Available

*The exact percentage of composition has been withheld as a trade secret*

### 4. FIRST-AID MEASURES

<b>General Advice</b>	If symptoms persist, call a physician. Do not get in eyes, on skin, or on clothing.
<b>Eye Contact</b>	Immediately flush eyes with water for at least 15 minutes. Get medical attention immediately.
<b>Skin Contact</b>	Wash immediately with plenty of warm, soapy water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. A poly-glycol-based skin cleaner or corn oil can be more effective than soap and water.
<b>Inhalation</b>	Breathe in fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician.
<b>Ingestion</b>	Do not induce vomiting unless directed otherwise by medical personnel. Do not give anything by mouth to an unconscious person. If the patient is conscious, proceed with washing out their mouth with water. Get medical attention if symptoms appear.

### 5. FIRE-FIGHTING MEASURES

**CAUTION:** Heating or Fire can release toxic gas, Due to reaction with water producing CO<sub>2</sub> gas, hazardous pressure build-up could result if containers are resealed. Containers can also burst if overheated.

<b>Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water only if no other options are available. The reaction between water and hot material can be vigorous.
<b>Hazardous Decomposition Products</b>	Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, and hydrocarbons
<b>Protective Equipment and Precautions for Fire-fighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. If there is a fire, promptly isolate the scene by removing all persons from the vicinity.
<b>Specific hazards arising from the chemical</b>	This product causes irritation of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of a fire, do not breathe fumes.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

No action shall be taken without suitable training or that involves any personal risk. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. 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 spilled material and runoff/contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Method and material for containment

If there is no risk, stop leak. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillage into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material, e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: 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 material is handled, stored and processed. Workers should wash their hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get into eyes.

Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material. Keep tightly closed when not in use. Empty containers retain product residue—it may be hazardous.

### Conditions for safe storage

Material is to be stored in accordance with local regulations. Store in original container protected from direct sunlight in a dry and well-ventilated area, away from incompatible materials (see Section 10) and away from food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

### Unsuitable Containers

Do not store in containers made of copper, copper alloys or galvanized surfaces.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### **Engineering Controls**

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below recommended or statutory limits. Smell is not an adequate indicator of hazard.

### **Ventilation**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or

engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Respiratory Protection**

In case of inadequate ventilation, wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Skin Protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Eye Protection**

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 or dusts.

**General Considerations**

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. When using chemicals, do not eat, drink or smoke. Wash contaminated clothing before reuse. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Boiling Point</b>	No Data	<b>Vapor Pressure</b>	No Data
<b>Appearance</b>	Opaque	<b>Melting Point</b>	No Data	<b>Vapor Density</b>	No Data
<b>Color</b>	Pale Yellow to Amber	<b>Flash Point</b>	226 F, 108 C	<b>Solubility</b>	No Data
<b>pH</b>	No Data	<b>Evaporation Rate</b>	No Data	<b>Specific Gravity</b>	1.14
<b>Odor</b>	Faint Odor	<b>Flammability</b>	No Data	<b>Partition Coefficient</b>	No Data
<b>Odor Threshold</b>	No Data	<b>Explosive Limits</b>	No Data	<b>Autoignition Temperature</b>	No Data
<b>% Weight Volatile (VOC)</b>	0.00	<b>Decomposition Temperature</b>	No Data	<b>Viscosity</b>	No Data

## 10. STABILITY AND REACTIVITY

**Chemical Stability**

Stable at room temperature. No specific test data related to reactivity is currently available.

**Hazardous Reactions**

A reaction with moisture produces CO<sub>2</sub> gas. Materials containing active hydrogen groups can create an exothermic reaction. The reaction can increase in violence and vigor at higher temperatures if the miscibility of the reaction partner is good, stirring occurs, or at the presence of solvents. This material is both insoluble and heavier than water. It will sink to the bottom and react slowly at the interface. A solid water insoluble layer of polyurea is formed by liberating carbon dioxide.

This material is reactive with the following chemicals: Water, Alcohols, Amines, Bases and Acids

## 11. TOXICOLOGICAL INFORMATION

**Information of routes of exposure**

<b>Product Information</b>	Avoid contact with skin, eyes, and inhalation of vapors
<b>Inhalation</b>	Avoid breathing vapors or mists; may be harmful if inhaled
<b>Eye contact</b>	Causes serious eye irritation
<b>Skin contact</b>	Irritating to skin
<b>Ingestion</b>	Do not taste or swallow. Harmful if swallowed

**Component Information**

Chemical Name	CAS No	Inhalation LC50	Dermal LD50
Propylene Carbonate	108-32-7	-	20 mL/kg (Rabbit)
Benzene, 1, 1'-methylenebis	26447-40-5	0.37 mg/L (Rat)	-

**Measures of Toxicity**

ATEmix (Inhalation LC50)	1 mg/L
ATEmix (dermal LD50)	4,030 mg/kg

**Exposure Effects**

<b>Sensitization</b>	No Information Available
<b>Carcinogenicity</b>	Contains Carcinogens
<b>Reproductive Toxicity</b>	No Information Available
<b>Aspiration hazard</b>	No Information Available

**Carcinogenicity**

Chemical Name	CAS No	% Weight
4,4'-Methylenediphenyl diisocyanate	101-68-8	20-30
Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer	25686-28-6	5-10
Benzene, 1,1'-methylenebis [isocyanato-	26447-40-5	0.1 – 1.0

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity** – No testing has been completed on this mixture related to ecological impact. The below information is based on components only.

Propylene carbonate	72 Hr EC50 <i>Desmodesmus subspicatus</i> : >500 mg/L; 96 Hr LC50 <i>Cyprinus carpio</i> : >1000 mg/L [semi-static]; 48 Hr EC50 <i>Daphnia magna</i> : >500 mg/L
Benzene, 1,1'-methylenebis [isocyanato-	14 Days LC50 <i>Eisenia foetida</i> : >1000 mg/kg [soil dry weight]; 14 Days NOEC <i>Eisenia foetida</i> : >=1000 mg/kg [soil dry weight]

**13. DISPOSAL CONSIDERATIONS**

**Disposal of Waste** 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. Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewer.

**Contaminated Packaging** Empty containers may retain some product residues. This material and its container must be disposed of safely. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

*Always follow regional, national and local laws and regulations when disposing material or containers*

**14. TRANSPORT INFORMATION**

The below information does not convey all specific regulatory information or requirements relating to this product

Agency	Proper Shipping Name	UN Number	Group	Hazard Class
DOT	Not Regulated			
IATA	Not Regulated			
IMDG	Not Regulated			

*\*Transportation classifications may vary by container volume and by local, regional or national regulations*

It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

**15. REGULATORY INFORMATION****International Inventories**

**TSCA (Toxic Substances Control Act)**

Complies

**SARA 313 (Superfund Amendments and Reauthorization Act)**

The below listed components are subject to the reporting requirements of the Act and Title 40

4,4'-Methylenediphenyldiisocyanate

101-68-8

20-30%

## US State Regulations

**California Proposition 65** – This product contains a chemical(s) known to the state of California to cause cancer or birth defects or other reproductive harm.

## 16. OTHER INFORMATION

### HMIS

*Hazardous Material Information System*

### NFPA

*National Fire Protection Association*

Health Hazards \*2

Flammability 1

Physical Hazards 1

Personal Protection X

Health Hazards 2

Flammability 1

Instability 1

Special X

#### HMIS and NFPA Hazard Rating Legend

*	Chronic Health Hazard
0	INSIGNIFICANT
1	SLIGHT
2	MODERATE
3	HIGH

## WHMIS Symbols



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Notes: Not Available

## Disclaimer

The information contained on the Safety Data Sheet has been compiled from data considered accurate. This data is believed to be reliable at the date of this publication. It is important to note that values for certain properties can vary from source to source. Genesis Poly LLC, expressly disclaims any warranty express or implied as well as any liability for any injury or loss arising from the use of this information or the materials described. No responsibility will be assumed for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. This data should not be construed as absolutely complete since additional data may be needed when particular conditions or circumstances exist. It is the responsibility of the user to determine the best precautions necessary for the safe handling and use of this product for each unique application. This data relates only to this specific material and is not to be used in combination with any other materials. Many federal and state regulations pertain directly or indirectly to the product's end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize himself with all applicable regulations prior to use. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

**END OF SAFETY DATA SHEET**