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# SAFETY DATA SHEET

### **ECOSPHERE 2202 BIOLATEX BINDER**

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification	:	ECOSPHERE 2202 BIOLATEX BINDER Mixture Mixture EM10021307
Product type	:	solid
<u>Relevant identified uses of the subs</u> Product use	tance :	or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	GEON Performance Solutions LLC 33587 Walker Road, Avon Lake, OH 44012
Emergency telephone number (with hours of operation)	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

### Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.
GHS label elements		
Signal word Hazard statements	:	No signal word. No known significant effects or critical hazards.

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#### **Precautionary statements**

General	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.
		Not available.

### Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	EM10021307

#### CAS number/other identifiers

Ingredient name	%	CAS number
1,2,3-Propanetriol	5 - 10	56-81-5
Ethanedial	1 - 3	107-22-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable
	for breathing. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated
	clothing and shoes. Get medical attention if symptoms occur.



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Ingestion	Wash out mouth with water. Remove vic	ctim to fresh air and keep at

Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.

#### **Over-exposure signs/symptoms**

Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Specific treatments	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

### Section 5. Firefighting measures

#### Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or $CO_2$ . None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal	:	Decomposition products may include the following materials:
decomposition products		carbon dioxide
		carbon monoxide
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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.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	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).
Methods and materials for containment	nt ai	id cleaning up
Small spill Large spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Move containers from spill area. Prevent entry into sewers, water
Darge spin	•	courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

### Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational	:	Eating, drinking and smoking should be prohibited in areas where this
hygiene		material is handled, stored and processed. Workers should wash hands
		and face before eating drinking and smoking Remove contaminated



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clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and 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. Use appropriate containment to avoid environmental contamination.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name	Exposure limits
1,2,3-Propanetriol	OSHA PEL 1989 (1989-03-01) TWA 10 mg/m3 Form: Total dust TWA 5 mg/m3 Form: Respirable fraction OSHA PEL (1993-06-30) TWA 15 mg/m3 Form: Total dust TWA 5 mg/m3 Form: Respirable fraction
Ethanedial	ACGIH TLV (2001-02-22) Skin sensitizer TWA 0.1 mg/m3 Form: Inhalable fraction and vapor AIHA WEEL (2000-01-01) Skin sensitizer TWA 0.1 mg/m3

Appropriate engineering controls Environmental exposure controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. 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.
Individual protection measures		
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical

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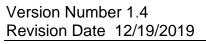
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Eye/face protection	:	products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. 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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection		
Hand 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.
Body protection	:	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.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

#### Appearance

Physical state	:	solid [Pellets.]
Color	:	NO PIGMENT
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.



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(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Solubility in water	:	Not available.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available.
		Kinematic: Not available.
<u>Aerosol product</u>		
Heat of combustion	:	Not available.
Ignition distance	:	Not available.
<b>Enclosed space ignition - Time</b>	:	Not available.
equivalent		
Enclosed space ignition -	:	Not available.

# Section 10. Stability and reactivity

Deflagration density Flame height

Flame duration

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Not available.

Not available.

:

:

# Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

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#### **Information on toxicological effects**

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
Ethanedial	·				
	LD50 Oral	Rat	200 mg/kg	-	
	LC50 Inhalation	Rat	2.41 Mg/l	4 h	
Remarks - Dermal:	No applicable toxicity data				
1,2,3-Propanetriol					
	LD50 Oral	Rat	12,600 mg/kg	-	
<b>Remarks - Inhalation:</b>	No applicable toxi	city data			
Remarks - Dermal:	No applicable toxi	city data			
Conclusion/Summary	• Mixtu	re Not fully tested			

Conclusion/Summary

Mixture.Not fully tested.

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Ethanedial	Eyes - Severe	Rabbit			-
	irritant				
	Eyes - Mild	Rabbit			-
	irritant				
	Skin - Mild	Rabbit			-
	irritant				
	Eyes -	Rabbit		24 hrs	-
	Moderate				
	irritant				
	Skin - Mild	Rabbit		4 hrs	-
	irritant				
1,2,3-Propanetriol	Skin - Mild	Rabbit		24 hrs	-
	irritant				
	Eyes - Mild	Rabbit		24 hrs	-
	irritant				

Conclusion/Summary		
Skin	:	Mixture.Not fully tested.
Eyes	:	Mixture.Not fully tested.
Respiratory	:	Mixture.Not fully tested.
<u>Sensitization</u>		
Conclusion/Summary		
Skin	:	Mixture.Not fully tested.
Respiratory	:	Mixture.Not fully tested.
<b>Mutagenicity</b>		



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Conclusion/Summary	:	Mixture.Not fully tested.
<b><u>Carcinogenicity</u></b>		
Conclusion/Summary	:	Mixture.Not fully tested.
<b><u>Reproductive toxicity</u></b>		
Conclusion/Summary	:	Mixture.Not fully tested.
<b>Teratogenicity</b>		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (sing Not available.	<u>le exp</u>	<u>osure)</u>
Specific target organ toxicity (repo Not available.	eated o	exposure)
<u>Aspiration hazard</u> Not available.		
Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact Inhalation Skin contact Ingestion	::	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Symptoms related to the physical, chemical and toxicological characteristics		
Eye contact Inhalation	:	No specific data. No specific data.
Skin contact Ingestion	:	No specific data. No specific data. No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

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Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure			
Ethanedial						
	Acute LC50 215 Mg/l Fresh water	Fish - Fish	96 h			
Remarks - Acute - Fish:	Acute					
Remarks - Acute - Aquatic	No applicable toxicity data					
invertebrates.:						
	Acute EC50 66.48 Mg/l Fresh	Aquatic plants - Algae	96 h			
	water					
<b>Remarks - Acute - Aquatic</b>	Acute					
plants:						
Remarks - Chronic - Fish:	No applicable toxicity data					
Remarks - Chronic -	No applicable toxicity data					
Aquatic invertebrates.:						

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1,2,3-Propanetriol				
Remarks - Acute - Fish:	No applicable toxicity data			
Remarks - Acute - Aquatic	No applicable toxicity data			
invertebrates.:				
Remarks - Acute - Aquatic	No applicable toxicity data			
plants:				
Remarks - Chronic - Fish:	No applicable toxicity data			
Remarks - Chronic -	No applicable toxicity data			
Aquatic invertebrates.:				
ECOSPHERE 2202 BIOLATE	EX BINDER			
Remarks - Acute - Aquatic	Chemicals are not readily available as they are bound within the polymer matrix.			
invertebrates.:				
Conclusion/Summary	: Chemicals are not readily available as they are bound within the			
	polymer matrix.			
Persistence and degradability	<u>Y</u>			
Conclusion/Summary	: Chemicals are not readily available as they are bound within the			
conclusion, summing	polymer matrix.			

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Ethanedial	-1.62	3.20	low
1,2,3-Propanetriol	-1.76	-	low

#### **Mobility in soil**

Soil/water partition coefficient	:	Not available.
(KOC)		
Other adverse effects	:	No known significant effects or critical hazards.

### Section 13. Disposal considerations

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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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

### Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Consult mode specific transport rules
International Water IMO/IMDG	:	Consult mode specific transport rules

### Section 15. Regulatory information

U.S. Federal regulations	: United States - TSCA 12(b) - Chemical export notification: None
	of the components are listed.
	United States - TSCA 4(a) - Final Test Rules: Not listed
	United States - TSCA 4(a) - ITC Priority list: Not listed
	United States - TSCA 4(a) - Proposed test rules: Not listed
	United States - TSCA 4(f) - Priority risk review: Not listed
	United States - TSCA 5(a)2 - Final significant new use rules: Not
	listed
	United States - TSCA 5(a)2 - Proposed significant new use rules:
	Not listed
	United States - TSCA 5(e) - Substances consent order: Not listed
	United States - TSCA 6 - Final risk management: Not listed
	United States - TSCA 6 - Proposed risk management: Not listed
	United States - TSCA 8(a) - Chemical risk rules: Not listed
	United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed
	United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not
	determined
	United States - TSCA 8(a) - Preliminary assessment report
	(PAIR): Listed Ethanedial



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		United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Not listed United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Listed
Clean Air Act Section 602 Class I	:	Not listed
Substances		
Clean Air Act Section 602 Class II	:	Not listed
Substances		
DEA List I Chemicals (Precursor	:	Not listed
Chemicals)		
DEA List II Chemicals (Essential Chemicals)	:	Not listed

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

not applicable

#### SARA 311/312

Classification

Not applicable.

:

#### **Composition/information on ingredients**

No products were found.

Name	%	Classification
Ethanedial	>= 1 - <= 3	ACUTE TOXICITY - oral - Category 3 ACUTE TOXICITY - inhalation - Category 3 EYE IRRITATION - Category 2A
1,2,3-Propanetriol	>= 5 - <= 10	EYE IRRITATION - Category 2B

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Not applicable.

State regulations		
Massachusetts	:	None of the components are listed.
New York	:	None of the components are listed.
New Jersey	:	The following components are listed:
		1,2,3-Propanetriol
		Ethanedial
Pennsylvania	:	The following components are listed:
		Starch
		1,2,3-Propanetriol
<u>California Prop. 65</u>		
This product does not require a Safe H	arbo	r warning under California Prop. 65.
United States inventory (TSCA 8b)	:	All components are active or exempted.
Canada inventory	:	All components are listed or exempted.
International regulations		
<u>Inventory list</u>		
Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Europe inventory	:	All components are listed or exempted.
Japan	:	All components are listed or exempted.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	All components are listed or exempted.
Turkey	:	Not determined.
United States	:	All components are active or exempted.

### Section 16. Other information

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

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required



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on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. History

<u>IIIStol y</u>		
Date of printing	:	12/19/2024
Date of issue/Date of revision	:	12/19/2019
Date of previous issue	:	05/28/2015
Version	:	1.4
Key to abbreviations	:	ATE = Acute Toxicity Estimate
-		BCF = Bioconcentration Factor
		GHS = Globally Harmonized System of Classification and Labelling of
		Chemicals
		IATA = International Air Transport Association
		IBC = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL = International Convention for the Prevention of Pollution From
		Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine
		pollution)
		UN = United Nations
References	:	Not available.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.