### MATERIAL SAFETY DATA SHEET Geon™ DB3999 RED 179C

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone:Emergency telephone:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	Geon™ DB3999 RED 179C
Product code	FO20030032
Chemical Name	Mixture
CAS-No.	Mixture
Product Use	Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Bisphenol A - Epichlorohydrin polymer	25068-38-6	1 - 5
Naphtha (petroleum), heavy alkylate	64741-65-7	1 - 5
Naphtha, petroleum, hydrotreated heavy	64742-48-9	1 - 5
Titanium dioxide	13463-67-7	0.1 - 1
Stoddard solvent	8052-41-3	1 - 5

#### **3. HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion	: May be harmful if swallowed.
Eyes	: May cause eye and skin irritation.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

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Medical Conditions       : None known.         Aggravated by Exposure:				
	4. FIRST AID MEASURES			
Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases doubt seek medical advice.	s of		
Ingestion	: Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.			
Eyes	: Rinse immediately with plenty of water for at least 15 minutes. If irritation persists, seek medical attention.	eye		
Skin	: Wash off with soap and plenty of water. If skin irritation persists seek medical attention.			
	5. FIRE-FIGHTING MEASURES			
Flash point	: no data available			
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	<ul> <li>no data available</li> <li>no data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> </ul>			
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	<ul> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) une fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke ar all possible.</li> </ul>	der		
	ACCIDENTAL RELEASE MEASURES			
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.			
Environmental precautions	: The product should not be allowed to enter drains, water courses of the soil. Should not be released into the environment.	r		
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in			

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 appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.

 7. HANDLING AND STORAGE

 Handling
 : Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.

 Storage
 : Keep containers dry and tightly closed to avoid moisture absorption

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection	:	No personal respiratory protective equipment normally required.
Eye/Face Protection	:	Safety glasses with side-shields
Hand protection	:	Protective gloves
Skin and body protection	:	Long sleeved clothing
Additional Protective Measures	:	Safety shoes
General Hygiene Considerations	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Engineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.

Exposure limit(s)

and contamination. Store in a cool dry place.

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Components	Value	Exposure time	Exposure type	List:
Stoddard solvent	100 ppm	Time Weighted Average (TWA):		ACGIH
	350	Recommended exposure		NIOSH
	mg/m3	limit (REL):		
	1,800	Ceiling Limit Value and		NIOSH
	mg/m3	Time Period (if specified):		
	500 ppm	PEL:		OSHA Z1
	2,900			
	mg/m3			
	100 ppm	Time Weighted Average		OSHA Z1A
	525 mg/m3	(TWA):		
	100 ppm	Time Weighted Average		MX OEL
	523 mg/m3	(TWA):		
	200 ppm	Short Term Exposure Limit		MX OEL
	1,050	(STEL):		
	mg/m3			
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average	Total dust.	OSHA Z1A
		(TWA):		
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:Appearance:Colour:Odour:Melting point/range:Boiling Point::Water solubility:

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- liquid
  viscous, liquid
  RED
  very faint
  not applicable
  not applicable
  immiscible
- Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- Not established
  Not determined
  Not applicable
  Not determined
  Not determined
  Not applicable

10. STABILITY AND REACTIVITY				
Stability	: Stable			
Hazardous Polymerization	: Will not occur.			
Conditions to avoid	: Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.			
Incompatible Materials	: Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.			

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Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F).

#### 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.

#### Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
25068-38-6	Bisphenol A -	Irritant	Skin.
	Epichlorohydrin polymer		
		sensitizer	Skin.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
8052-41-3	Stoddard solvent	Systemic effects	Kidney, Liver, central nervous
			system (CNS).
		Irritant	Eyes, Skin, Respiratory
			system.

#### LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

CAS-No.	Chemical Name	Route	Value	Species
25068-38-6	Bisphenol A -	Oral LD50	11,400 mg/kg	rat
	Epichlorohydrin polymer	Dermal LD50	> 6,000 mg/kg	rabbit
8052-41-3	Stoddard solvent	Oral LD50	> 5,000 mg/kg	rat
		Dermal LD50	> 3,000 mg/kg	rabbit

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
13463-67-7	Titanium dioxide	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

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	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	: no data available
Additional advice	: no data available
	13. DISPOSAL CONSIDERATIONS
Product	: Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
Contaminated packaging	: Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	14. TRANSPORT INFORMATION
U.S. DOT Classification	: Refer to specific regulation.
ICAO/IATA	: Refer to specific regulation.
IMO/IMDG (maritime)	: Refer to specific regulation.
	15. REGULATORY INFORMATION
US Regulations:	
OSHA Status	: Classified as hazardous based on components.
TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.
US. EPA CERCLA Hazardous	Substances (40 CFR 302)
not applicable	
California Proposition 65	: WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Canadian Regulations:

National Pollutant Release Inventory (NPRI)			
Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Miscellaneous Zinc Compounds	0-05-5	0.10 - 1.00	241

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
8052-41-3	

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS	: Not determined
China IECS	: Not determined
Europe EINECS	: Not determined
Japan ENCS	: Not determined
Korea KECI	: Not determined
Philippines PICCS	: Not determined

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### **16. OTHER INFORMATION**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The

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information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.