MATERIAL SAFETY DATA SHEET

Geon[™] FB579 Euro Brown

Version Number 1.0 Revision Date 12/07/2012 Page 1 of 6 Print Date 12/7/2012

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	Geon [™] FB579 Euro Brown
Product code	:	FO20030534
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Titanium dioxide	13463-67-7	0.1 - 1

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.			
Chronic exposure	: Refer to Section 11 for Toxicological Information.			

PolyOne.

MATERIAL SAFETY DATA SHEET

Geon™ FB579 Euro Brown

Version Number 1.0 Revision Date 12/07/2012 Page 2 of 6 Print Date 12/7/2012

Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures	 doubt seek medical advice. Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice. Rinse immediately with plenty of water for at least 15 minutes. If ey irritation persists, seek medical attention. Wash off with soap and plenty of water. If skin irritation persists seek medical attention. 5. FIREFIGHTING MEASURES no data available no data available Not applicable 	
Ingestion : Eyes : Skin : Flash point : Flammable Limits : Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures :	 overheating or combustion. When symptoms persist or in all cases of doubt seek medical advice. Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice. Rinse immediately with plenty of water for at least 15 minutes. If eyrirritation persists, seek medical attention. Wash off with soap and plenty of water. If skin irritation persists seek medical attention. 5. FIREFIGHTING MEASURES no data available no data available Not applicable 	
Eyes : Skin : Flash point : Flammable Limits : Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures :	 persist or in all cases of doubt seek medical advice. Rinse immediately with plenty of water for at least 15 minutes. If eyrirritation persists, seek medical attention. Wash off with soap and plenty of water. If skin irritation persists seek medical attention. 5. FIREFIGHTING MEASURES no data available no data available Not applicable 	
Skin : Flash point : Flammable Limits Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures	 irritation persists, seek medical attention. Wash off with soap and plenty of water. If skin irritation persists seek medical attention. 5. FIREFIGHTING MEASURES no data available no data available no data available Not applicable 	
Flash point : Flammable Limits Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures	seek medical attention. 5. FIREFIGHTING MEASURES no data available no data available Not applicable	
Flammable Limits Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures	no data available no data available no data available Not applicable	
Flammable Limits Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures	no data available no data available Not applicable	
Upper explosion limit : Lower explosion limit : Auto-ignition temperature : Suitable extinguishing media : Special Fire Fighting : Procedures	no data available Not applicable	
Lower explosion limit Auto-ignition temperature Suitable extinguishing media: no data available : Not applicableSpecial Fire Fighting Procedures: Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.Unusual Fire/Explosion Hazards: May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.		
6. A	CCIDENTAL 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 or the soil. Should not be released into the environment.	
Methods for cleaning up :	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in appropriate container for disposal.	
	7. HANDLING AND STORAGE	

<u>PolyOne</u>

MATERIAL SAFETY DATA SHEET Geon™ FB579 Euro Brown

Version Number 1.0 Revision Date 12/07/2012		Page 3 of 6 Print Date 12/7/2012
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 and contamination. Store in a cool dry place.
8. EXI	POSU	RE 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)

Components	Value	Exposure time	Exposure type	List:
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
	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	as Ti	MX OEL
		(TWA):		
	20 mg/m3	Short Term Exposure Limit	as Ti	MX OEL
		(STEL):		

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- : liquid
 : viscous, liquid
 : BROWN
 : 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 determined
 Not applicable

blvUn<u>e</u>

MATERIAL SAFETY DATA SHEET Geon™ FB579 Euro Brown

Version Number 1.0 Revision Date 12/07/2012

Page 4 of 6 Print Date 12/7/2012

	10. STABILITY AND REACTIVITY
Stability	: The product is stable if stored and handled as prescribed.
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.
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
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

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.

12. ECOLOGICAL INFORMATION

Persistence and degradability

: Not readily biodegradable.

PolyOne.

MATERIAL SAFETY DATA SHEET Geon™ FB579 Euro Brown

Version Number 1.0 Revision Date 12/07/2012 Page 5 of 6 Print Date 12/7/2012

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. Th 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	: Not applicable
SARA Title III Section 302 Ex	tremely Hazardous Substance

MATERIAL SAFETY DATA SHEET Geon™ FB579 Euro Brown

Version Number 1.0 Revision Date 12/07/2012

Page 6 of 6 Print Date 12/7/2012

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
2-Ethylhexanoic acid zinc salt	136-53-8	0.10 - 1.00	

WHMIS Classification : D2A

DSL

: DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

		16. OTHER INFORMATION
Philippines PICCS	:	Not determined
Korea KECI	:	Not determined
Japan ENCS	:	Not determined
Europe EINECS	:	Not determined
China IECS	:	Not determined
Australia AICS	:	Not determined

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 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.