PolvOne

## MATERIAL SAFETY DATA SHEET FRPE WHT 161816

Version Number 1.2 Revision Date 10/19/2012

Product Use

Page 1 of 7 Print Date 10/22/2012

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

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	:	FRPE WHT 161816
Product code	:	CC10161816
Chemical Name	:	Mixture
CAS-No.	:	Mixture

#### : Industrial Applications

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
1,1'-(Ethane-1,2-	84852-53-9	30 - 60
diyl)bis[pentabromobenzene]		
Titanium dioxide	13463-67-7	5 - 10
Antimony trioxide	1309-64-4	10 - 30

#### 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

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.

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion	: May be harmful if swallowed.
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

PolyOne.

# MATERIAL SAFETY DATA SHEET **FRPE WHT 161816**

Version Number 1.2 Revision Date 10/19/2012 Page 2 of 7 Print Date 10/22/2012

Medical Conditions Aggravated by Exposure:	:	None known.	
		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 of doubt seek medical advice.	
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, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.	
Skin	:	Wash off with soap and plenty of water. If skin irritation persists seek medical attention.	
		5. FIREFIGHTING MEASURES	
Flash point	:	not applicable	
Flammable Limits			
Upper explosion limit	:	not applicable	
Lower explosion limit	:	not applicable	
Auto-ignition temperature	:	not applicable	
Suitable extinguishing media	:	Carbon dioxide blanket, Water spray, Dry powder, Foam.	
Special Fire Fighting	:	Fullface self-contained breathing apparatus (SCBA) used in positive	
Procedures		pressure mode should be worn to prevent inhalation of airborne	
		contaminants.	
Unusual Fire/Explosion Hazards	:	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	:	Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.	
Methods for cleaning up	:	Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal.	
		7. HANDLING AND STORAGE	



## MATERIAL SAFETY DATA SHEET FRPE WHT 161816

Version Number 1.2 Revision Date 10/19/2012		Page 3 of 7 Print Date 10/22/2012
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EXPOS	U	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)

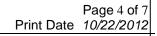
Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
	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

PolyOne

## MATERIAL SAFETY DATA SHEET FRPE WHT 161816

Version Number 1.2 Revision Date 10/19/2012



Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility	<ul> <li>solid</li> <li>pellets</li> <li>WHITE</li> <li>very faint</li> <li>Not determined</li> <li>not applicable</li> <li>insoluble</li> </ul>	Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH	<ul> <li>Not applicable</li> <li>Not determined</li> <li>Not established</li> <li>not applicable</li> <li>not applicable</li> <li>not applicable</li> </ul>
	10. STABILITY ANI	D 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.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

#### **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
84852-53-9	1,1'-(Ethane-1,2-	Chronic effects	Skin, Respiratory system.
	diyl)bis[pentabromobenze		
	ne]		
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.

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
84852-53-9	1,1'-(Ethane-1,2- diyl)bis[pentabromobenze ne]	Oral LD 50 Dermal LD 50	> 5,000 mg/kg > 2,000 mg/kg	Rat rabbit
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/kg	rat

Carcinogenicity

# MATERIAL SAFETY DATA SHEET **FRPE WHT 161816**

## Version Number 1.2

Revision Date 10/19/2012

Page 5 of 7 Print Date 10/22/2012

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
1309-64-4	Antimony trioxide	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.

### Additional Health Hazard Information:

Antimony trioxide 1309-64-4 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the polymer matrix.
Additional advice	: no data available
	13. DISPOSAL CONSIDERATIONS
Product	: Like most thermoplastic plastics the product can be recycled. Wher 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	: Not regulated for transportation.

PolyOne.

# MATERIAL SAFETY DATA SHEET **FRPE WHT 161816**

	n Number 1.2 on Date 10/19/2012	Page 6 of 7 Print Date 10/22/2012									
IC	CAO/IATA	:	Refer to specific	regulatio	on.						
IN	MO/IMDG (maritime)	:	Refer to specific	regulatio	on.						
	15. REGULATORY INFORMATION										
U	US Regulations:										
OSHA Status : Classified as hazardous based on co						omponents.					
	TSCA Status	TSCA Status : All components of this product are listed on or exempt from the TSCA Inventory.						ie			
U	US. EPA CERCLA Hazardous Substances (40 CFR 302)										
	not applicable										
	California Proposition : WARNING! This product contains a chemical known to the State of										
	65		California to cau	ise cance	r.						
U Sz	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:										
U	Unless specific chemicals are identified under this se Chemical Name							percent	regulation		
-	ANTIMONY COMPOUNDS				1309-64-4		10.00 -				
C	Canadian Regulations: National Pollutant Release Inventory (NPRI)										
	Chemical Name		CAS-No.		Weight percent		NPRI ID	)#			
	Antimony trioxide	1309 trioxide		1309-6			30.00				
	WHMIS Classification WHMIS Ingredient Discl CAS-No.	: .osu	D2A re List								

POLYONE CORPORATION

PolyOne

## MATERIAL SAFETY DATA SHEET FRPE WHT 161816

Version Number 1.2 Revision Date 10/19/2012 Page 7 of 7 Print Date 10/22/2012

1309-64-4			
DSL	:	DSL status has not been determined. Quantity use in Canada may be restricted by regulations.	
National Inventories:			
Australia AICS	:	Not determined	
China IECS	:	Listed	
Europe EINECS	:	Listed	
Japan ENCS	:	Not determined	
Korea KECI	:	Listed	
Philippines PICCS	:	Listed	
		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 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.