## MATERIAL SAFETY DATA SHEET 10107541HBPVC-131 STEEL GRAY

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### 1. PRODUCT AND COMPANY IDENTIFICATION

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

Telephone Emergency telephone	:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	10107541HBPVC-131 STEEL GRAY
Product code	:	CC10107541
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	68412-38-4	1 - 5
Calcium stearate	1592-23-0	1 - 5
Carbon black	1333-86-4	1 - 5
Rutile, antimony chromium buff	68186-90-3	1 - 5
Calcium carbonate	1317-65-3	5 - 10
Titanium dioxide	13463-67-7	30 - 60

#### **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	: Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system.
Ingestion Eyes	<ul><li>May be harmful if swallowed.</li><li>Particulates, like other inert materials can be mechanically irritating.</li></ul>

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Skin	: Experience shows no unusual dermatitis hazard from routine handling
Chronic exposure	: Refer to Section 11 for Toxicological Information.
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 o 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 a 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. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne</li> </ul>
Unusual Fire/Explosion Hazards	<ul> <li>contaminants.</li> <li>Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.</li> </ul>
	6. ACCIDENTAL 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 no 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

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Handling

Storage

plastic, cardboard or metal containers for disposal. Refer to Section 13 of this MSDS for proper disposal methods. 7. HANDLING AND STORAGE Take measures to prevent the build up of electrostatic charge. Heat : only in areas with appropriate exhaust ventilation. Keep containers dry and tightly closed to avoid moisture absorption : and contamination. Keep in a dry, cool place. 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)

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Components	Value	Exposure time	Exposure type	List:
Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	5 mg/m3	Ceiling Limit Value:	as Mn	OSHA Z1
	0.2 mg/m3	Time Weighted Average (TWA):	as Mn	ACGIH
	0.2 mg/m3	Time Weighted Average (TWA):	as Mn	MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Calcium stearate	10 mg/m3	Time Weighted Average (TWA):		ACGIH
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):		ACGIH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Rutile, antimony chromium buff	0.5 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
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):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

### 9. PHYSICAL AND CHEMICAL PROPERTIES

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Form Appearance Color Odour Melting point/range Boiling Point: Water solubility	<ul> <li>Solid</li> <li>pellets</li> <li>GREY</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	) REACTIVITY	
Stability	: Stable.		
Hazardous Polymerization	: Will not occur.		
Conditions to avoid	: Keep away from ox decomposition, do	idizing agents and open fl not overheat.	ame. To avoid thermal
Incompatible Materials	or acetal copolymer processing. At pro- destructive and inve- mechanically clean quantities of these	strong oxidizers. Also, av rs and with amine containi cessing conditions, these r olve rapid degradation. Th processing equipment to a naterials from coming in o mination of feedstocks.	ing materials during naterials are mutually horoughly purge and avoid even trace
Hazardous decomposition products	(NOx), hydrogen cl smoke are all possi or more) above 392	D2), carbon monoxide (CC hloride (HCl), other hazard ble. Prolonged heating (ap 2 °F (200 °C) or short term roduct decomposition and ogen chloride.	dous materials, and pproximately 30 minutes heating at 482 °F (250

### 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.

<u>Toxicity Overview</u> This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
68412-38-4	Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	Irritant	Eyes, Skin.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.



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13463-67-7	Titanium dioxide	Systemic effects	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
1592-23-0	Calcium stearate	Oral LD50	> 10 gm/kg	rat
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/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.

### Additional Health Hazard Information:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

### Additional Health Hazard Information:

Rutile, antimony chromium buff 68186-90-3 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).

Persistence and degradability	:	Not readily biodegradable.
Environmental Toxicity	:	Chemicals are not readily available as they are bound within the polymer matrix.

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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. W possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper wast 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.	
ICAO/IATA (air)	: 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 Hazardou	s Substances (40 CFR 302)	
Not applicable		
California Proposition 65	: Not applicable	
SARA Title III Section 302 E	stremely Hazardous Substance	
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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

Chemical Name	CAS-No.	Weight %
MANGANESE COMPOUNDSANTIMONY	68412-38-4	1.00 - 5.00
COMPOUNDS		
CHROMIUM III COMPOUNDSANTIMONY	68186-90-3	1.00 - 5.00
COMPOUNDS		

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Aluminum oxide	1344-28-1	0.10 - 1.00	13
Manganese antimony titanium brown rutile (C.I.	68412-38-4	1.00 - 5.00	147
Pigment Yellow 164)			
		1.00 - 5.00	17
Rutile, antimony chromium buff	68186-90-3	1.00 - 5.00	69
		1.00 - 5.00	17

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
68412-38-4
1333-86-4
68186-90-3

DSL

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

National Inventories:

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

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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.