

MATERIAL SAFETY DATA SHEET

GRAY

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE	:	Product Stewardship (770) 271-5902
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	GRAY
Product code	:	CC10002538
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	0.1 - 1
Titanium dioxide	13463-67-7	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some fumes may be released upon heating or crosslinking and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect his employee from exposure. See Sections 3 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation Ingestion	 Resin particles, like other inert materials, can be mechanically irritating. 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.
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 see 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 Unusual Fire/Explosion Hazards	 Not applicable Not applicable Not relevant Carbon dioxide blanket, water spray, dry powder, foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. None
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 plastic, cardboard or metal containers for disposal. Refer to Section 1 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE

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Storage		eep containers dry and tightly nd contamination. Keep in a d		ture absorption	
8. 1	EXPOSURE	CONTROLS / PERSONAL	PROTECTION		
Respiratory protection	: N	lo personal respiratory protecti	ve equipment normal	ly required.	
Eye/Face Protection	: S	afety glasses with side-shields			
Hand protection	: P	rotective gloves.			
Skin and body protection	: L	ong 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		leat only in areas with appropr ppropriate exhaust ventilation		on. Provide	
Exposure limit(s)					
Components	Value	Exposure time	Exposure type	List:	
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):		ACGIH	
	3.5 mg/m3	PEL:		OSHA Z1	
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL	
	10 mg/m3	Time Weighted Average	Total dust.	ACGIH	
Titanium dioxide		(TWA):			
Titanium dioxide	15 mg/m3	PEL:	Total dust.	OSHA Z1	
Titanium dioxide	-			OSHA ZI	
	-	PEL:	PERTIES	OSHA Z1	
Form Appearance	9. PHYSIC	PEL: CAL AND CHEMICAL PRO I Evapo sts Specif	PERTIES ration rate : M ic Gravity : M		
Form Appearance Color	9. PHYSIC : Solic : Pelle : GRE	PEL: CAL AND CHEMICAL PRO E Evapo ts Specif Y Bulk d	PERTIES ration rate : N ic Gravity : N ensity : N	Not applicable. Not determined. Not established	
Form Appearance Color Odor	9. PHYSIC : Solic : Pelle : GRE : Very	PEL: CAL AND CHEMICAL PRO I Evapo ts Specif Y Bulk d faint Vapor	PERTIES ration rate : N ic Gravity : N ensity : N pressure : N	Not applicable. Not determined. Not established Not applicable	
Form Appearance Color Odor Melting point/range	9. PHYSIC : Solid : Pelle : GRE : Very : Not o	PEL: CAL AND CHEMICAL PRO t Evapor ts Specif Y Bulk d faint Vapor determined. Vapor	PERTIES ration rate : N ic Gravity : N ensity : N pressure : N density : N	Not applicable. Not determined. Not established Not applicable Not applicable	
Form Appearance Color Odor Melting point/range Boiling Point:	9. PHYSIC : Solic : Pelle : GRE : Very : Not c : Not a	PEL: CAL AND CHEMICAL PRO I Evapo Its Specif Y Bulk d faint Vapor determined. Vapor applicable pH	PERTIES ration rate : N ic Gravity : N ensity : N pressure : N density : N	Not applicable. Not determined. Not established Not applicable	
Form Appearance Color Odor Melting point/range	9. PHYSIC : Solid : Pelle : GRE : Very : Not o	PEL: CAL AND CHEMICAL PRO I Evapo Its Specif Y Bulk d faint Vapor determined. Vapor applicable pH	PERTIES ration rate : N ic Gravity : N ensity : N pressure : N density : N	Not applicable. Not determined. Not established Not applicable Not applicable	
Form Appearance Color Odor Melting point/range Boiling Point:	9. PHYSIC : Solic : Pelle : GRE : Very : Not c : Not c : Insol	PEL: CAL AND CHEMICAL PRO ts Evapo ts Specif Y Bulk d faint Vapor determined. Vapor applicable pH	PERTIES ration rate : ic Gravity : ensity : pressure : density : : N	Not applicable. Not determined. Not established Not applicable Not applicable	
Form Appearance Color Odor Melting point/range Boiling Point:	9. PHYSIC : Solid : Pelle : GRE : Very : Not d : Insol 10. S	PEL: CAL AND CHEMICAL PRO Exapo ts Specif Y Bulk d faint Vapor determined. Vapor applicable pH uble	PERTIES ration rate : ic Gravity : ensity : pressure : density : : N	Not determined. Not established Not applicable Not applicable	



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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
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
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
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
1333-86-4	Carbon black	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:



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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). 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.

	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Chemicals are not readily available as they are bound within the matrix of the polymer.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the matrix of the polymer.
Additional advice	: No data available.
	13. DISPOSAL CONSIDERATIONS
Product	: Like most thermoplastics the product can be recycled. 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 materia 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. D.O.T. / CA T.D.G. Classification (Non-bulk ground)	: Not regulated for transportation.
ICAO/IATA	: Not regulated for transportation.
IMO / IMDG	: Not regulated for transportation.
	15. REGULATORY INFORMATION
US Regulations:	
ob Regulations.	



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OSHA Status	:	Classified as hazardous based on components.
TSCA Status	:	All components of this product are listed on the TSCA inventory or are exempt.
California Proposition 65	:	This product does not contain a substance listed by California Prop 65.
Canadian Regulations:		
WHMIS Classification	:	D2B
WHMIS Ingredient Disc	losı	ure List
CAS-No. 1333-86-4 1308-38-9		
DSL	:	Listed.
National Inventories:		
Australia AICS	:	Listed.
China IECS	:	Listed.
Europe EINECS	:	Not determined.
Japan ENCS	:	Listed.
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.