

MATERIAL SAFETY DATA SHEET

GRAY

Version Number 1.0 Revision Date 06/10/2002 Page 1 of 7 Print Date 11/4/2011

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	:	CC10016689
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	0.1 - 1
Chrome yellow (Lead chromate pigment)	1344-37-2	1 - 5

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 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:	e: : Inhalation, Ingestion, Skin contact		
Acute exposure			
Inhalation Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. 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.		



MATERIAL SAFETY DATA SHEET

GRAY

	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 at least 15 minutes. If eye irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists seel medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits	
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Autoignition temperature	: Not relevant
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	: 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 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. Refer to Section 13 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE
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



MATERIAL SAFETY DATA SHEET

GRAY

Version Numbe	er 1.0
Revision Date	06/10/2002

Page 3 of 7 Print Date 11/4/2011

and contamination. Keep in a dry, cool place.					
8. EXI	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)

Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Time Weighted Average	Total dust. as carbon	ACGIH
		(TWA):	black	
Carbon black	3.5 mg/m3	PEL:	Total dust. as carbon	OSHA Z1
			black	
Chrome yellow (Lead	0.01	Time Weighted Average	as Cr	ACGIH
chromate pigment)	mg/m3	(TWA):		
Chrome yellow (Lead	1 mg/m3	Time Weighted Average		MX OEL
chromate pigment)		(TWA):		
	1 mg/m3	PEL:		OSHA Z1
Chrome yellow (Lead	0.05	Time Weighted Average	as Pb	ACGIH
chromate pigment)	mg/m3	(TWA):		
Chrome yellow (Lead	0.05	Time Weighted Average		OSHA
chromate pigment)	mg/m3	(TWA):		
	0.03	OSHA Action level:		OSHA
	mg/m3			
Chrome yellow (Lead	0.15	Time Weighted Average	Dust and fume. as Pb	MX OEL
chromate pigment)	mg/m3	(TWA):		
	0.45	Short Term Exposure Limit	Dust and fume. as Pb	MX OEL
	mg/m3	(STEL):		
Chrome yellow (Lead	0.01	Time Weighted Average		ACGIH
chromate pigment)	mg/m3	(TWA):		
Chrome yellow (Lead	0.05	Time Weighted Average		ACGIH
chromate pigment)	mg/m3	(TWA):		

9. PHYSICAL AND CHEMICAL PROPERTIES

MATERIAL SAFETY DATA SHEET

GRAY

Version Number 1.0			Page 4 of 7
Revision Date 06/10/2002			Print Date 11/4/2011
Form	: Solid	Evaporation rate	: Not applicable.
Appearance	: Pellets	Specific Gravity	: Not determined
Color	: GREY	Bulk density	: Not established
Odor	: Very faint	Vapor pressure	
Melting point/range	: Not determined	Vapor density	: Not applicable
Boiling Point:	: Not applicable	pH	: Not applicable
Water solubility	: Insoluble		
	10. STABILITY AN	D REACTIVITY	
Stability	: Stable.		
Hazardous Polymerization	: Will not occur.		
Conditions to avoid	: Keep away from o decomposition, do	xidizing agents and open f	lame. To avoid thermal
Incompatible Materials	: Incompatible with strong acids and oxidizing agents.		
Hazardous decomposition products		CO2), carbon monoxide (CC rdous materials, and smoke	•

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.
1344-37-2	Chrome yellow (Lead	Systemic effects	central nervous system,
	chromate pigment)		reproductive 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

4/7

olvOne.





MATERIAL SAFETY DATA SHEET

GRAY

Version Numb	er 1.0
Revision Date	06/10/2002

Page 5 of 7 Print Date 11/4/2011

1344-37-2	Chrome yellow (Lead	no	1	no
	chromate pigment)			

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). 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:

Chrome yellow (Lead chromate pigment) 1344-37-2 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

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.
	: Recycling is preferred when possible. The generator of waste materia



MATERIAL SAFETY DATA SHEET

GRAY

and disposal in a and local regulat			ccordance with applicable federal, state/provincial ions.		
	1	4. TRANSPORT	INFORMATION	N	
U.S. D.O.T. / CA T. Classification (Non- ground)		Not regulated for	transportation.		
ICAO/IATA		: Not regulated for transportation.			
IMO / IMDG		: Not regulated for transportation.			
	15	5. REGULATORY	INFORMATIC	N	
US Regulations:					
OSHA Statu	s :	Classified as haza	rdous based on c	omponents.	
TSCA Status : All con			ll components of this product are listed on the TSCA inventory or are		
US. EPA CERCLA	Hazardous Sub	-	(2)		
			_)		
Not app	nicable				
California Pı 65	roposition :			s a chemical known in the St ING! This product contains	
05		chemical known i	n the State of Cal	ifornia to cause birth defects	
		other reproductive	e harm.		
SARA Title III Sect	ion 313 Toxic (Chemicals:			
	nical Name		CAS-No.	Weight %	
Chen	OMIUM VI CO		1344-37-2	1.32	
CHR	LEAD COMPOUNDS, INORGANIC		1314-98-3	20.20	
CHR LEA		ZINC COMPOUNDS		29.39	
CHR LEA		18			
CHR LEA	C COMPOUNE	05			
CHR LEA ZINC	C COMPOUNE				
CHR LEA ZINC Canadian Regulation WHMIS Cla	C COMPOUNE	D2A			
CHR LEA ZINC Canadian Regulation WHMIS Cla WHMIS Ingr	C COMPOUNE ns: ssification :	D2A			

MATERIAL SAFETY DATA SHEET



GRAY Version Number 1.0 Revision Date 06/10/2002

Page 7 of 7 Print Date 11/4/2011

Revision Date 06/10/2002	Print Date 11/4/2011				
1333-86-4 1344-37-2					
DSL :	Listed.				
National Inventories:					
Australia AICS :	Listed.				
China IECS :	Listed.				
Europe EINECS :	Not determined.				
Japan ENCS :	Not determined.				
Korea KECI :	Not determined.				
Philippines PICCS :	Not determined.				
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.