MATERIAL SAFETY DATA SHEET **MB GRANITE PS**

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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	:	MB GRANITE PS
Product code	:	CC10066846
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Carbon black	1333-86-4	5 - 10
Rutile, antimony chromium buff	68186-90-3	5 - 10
Zinc stearate	557-05-1	5 - 10
Chromium (III) oxide	1308-38-9	10 - 30
Titanium dioxide	13463-67-7	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.



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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 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. FIRE-FIGHTING MEASURES	
Flash point	: not applicable	
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. 	
Special 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	: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.	
	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	

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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. EX	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.

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Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):		ACGIH
	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Chromium (III) oxide	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
Rutile, antimony chromium buff	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	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
	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):	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
Zinc stearate	5 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	10 mg/m3	Recommended exposure limit (REL):	Total	NIOSH
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A

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	10 mg/m3	Time Weighted Ave (TWA):	rage		MX OEL
	20 mg/m3	Short Term Exposure (STEL):	Limit		MX OEL
	10 mg/m3	Time Weighted Ave (TWA):	rage		ACGIH
	9. PHYSIC	CAL AND CHEMICA	L PROPERTIES		
Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility	: Not o	ts EY faint determined upplicable	Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH	: No : No : not : not	t applicable t determined t established applicable applicable applicable
	10. 8	STABILITY AND REA	ACTIVITY		
Stability	: S	table			
Hazardous Polymerization	: W	Vill not occur.			
Conditions to avoid		Keep away from oxidizing agents and open flame. To avoid decomposition, do not overheat.		avoid thermal	
Incompatible Materials	: Ir	ncompatible with strong	g acids and oxidizing	agents.	
Hazardous decomposition	: C	Carbon dioxide (CO2), c	arbon monoxide (CC), oxides	of nitrogen

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.

(NOx), other hazardous materials, and smoke are all possible.

Toxicity Overview

products

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.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
557-05-1	Zinc stearate	Systemic effects	Eyes, Skin, Respiratory system.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

LC50 / LD50

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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
557-05-1	Zinc stearate	Oral LD50	> 10 gm/kg	rat

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:

Chromium (III) oxide 1308-38-9 The bi- and trivalent forms of chrome have a low order of acute toxicity, but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans.

	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

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	13. DISPO	OSAL CONSIDERAT	IONS	
Product Contaminated packaging	possibl generat classifi applica : Recycl materia transpo	e recycling is preferred or of waste material has cation, transportation ar ble federal, state/provin ing is preferred when po l has the responsibility	es the product can be recycled. Note to disposal or incineration. The state responsibility for proper was disposal in accordance with cial and local regulations.	iste
	14. TRA	NSPORT INFORMAT	TION	
U.S. DOT Classification	: Not reg	gulated for transportation	1.	
ICAO/IATA	: Refer to	o specific regulation.		
IMO/IMDG (maritime)	: Refer to	o specific regulation.		
	15. REGU	LATORY INFORMA	TION	
US Regulations:				
OSHA Status	: Classif	ied as hazardous based o	on components.	
TSCA Status		mponents of this produc Inventory.	t are listed on or exempt from th	e
US. EPA CERCLA Hazard	dous Substances (40 CFR 302)		
Chemical Name	CAS-No.	RQ for component	RQ for	
Chromium (III) oxide	1308-38-9	010 lbs	Mixture/Product 81 LB	

SARA Title III Section 302 Extremely 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 percent
CHROMIUM III COMPOUNDSCHROMIUM	1308-38-9	10.00 - 30.00
COMPOUNDS		
CHROMIUM III COMPOUNDSCHROMIUM III	68186-90-3	5.00 - 10.00
COMPOUNDSANTIMONY COMPOUNDS		
ZINC COMPOUNDS	557-05-1	5.00 - 10.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Aluminum oxide	1344-28-1	0.10 - 1.00	
Chromium (III) oxide	1308-38-9	10.00 - 30.00	
Rutile, antimony chromium buff	68186-90-3	5.00 - 10.00	
Zinc stearate	557-05-1	5.00 - 10.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
1333-86-4
1308-38-9
68186-90-3
557-05-1

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.