MATERIAL SAFETY DATA SHEET X PS-152620101

Version Number 1.0 Revision Date 09/30/2009

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone : Emergency telephone :	:	Product Stewardship (440) 930-1395 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	X PS-152620101
Product code	:	EM10018565
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Glass, oxide	65997-17-3	30 - 60
Carbon black	1333-86-4	0.1 - 1

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 Ingestion Eyes Skin	 Particulates, like other inert materials can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. 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.

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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. FIRE-FIGHTING MEASURES
Flash point	:	not applicable
P 1		
Flammable Limits		not applicable
Upper explosion limit Lower explosion limit	:	not applicable not applicable
Autoignition temperature	:	not applicable
Suitable extinguishing media	:	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. 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. 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

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0.	lai usuke	UUUIKULO/FERDUNAL F	NULCTION	
Respiratory protection	: N	o personal respiratory protectiv	ve equipment normally	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	: S	afety shoes		
General Hygiene Considerations		andle in accordance with good ractice. Wash hands before bre		
Engineering measures		eat only in areas with appropriate exhaust ventilation a		Provide
Exposure limit(s)				
Components	Value	Exposure time	Exposure type	List:
Components Carbon black	Value 3.5 mg/m3	Time Weighted Average	Exposure type	List: ACGIH
		Time Weighted Average (TWA): Recommended exposure	Exposure type	
	3.5 mg/m3	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure	Exposure type	ACGIH
	3.5 mg/m3 3.5 mg/m3	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL:	Exposure type	ACGIH NIOSH
	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL):	Exposure type	ACGIH NIOSH NIOSH
	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average	Exposure type	ACGIH NIOSH NIOSH OSHA Z1
	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA):	Exposure type	ACGIH NIOSH NIOSH OSHA Z1 OSHA Z1A
	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 7 mg/m3	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): Short Term Exposure Limit		ACGIH NIOSH NIOSH OSHA Z1 OSHA Z1A MX OEL
	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 7 mg/m3	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	PERTIES	ACGIH NIOSH NIOSH OSHA Z1 OSHA Z1A MX OEL MX OEL
Carbon black	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3 7 mg/m3 9. PHYSIC : solid	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	PERTIES ation rate : No	ACGIH NIOSH NIOSH OSHA Z1 OSHA Z1A MX OEL MX OEL
Carbon black	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 7 mg/m3 9. PHYSIC : solid : pelle	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	PERTIES ation rate : No c Gravity : No	ACGIH NIOSH NIOSH OSHA Z1 OSHA Z1A MX OEL MX OEL
Carbon black	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 7 mg/m3 9. PHYSIC : solid : pelle : BLA	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	PERTIES ation rate : No c Gravity : No ensity : No	ACGIH NIOSH NIOSH OSHA Z1 OSHA Z1A MX OEL MX OEL
Carbon black	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 7 mg/m3 9. PHYSIC : solid : pelle : BLA : very	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	PERTIES ation rate : No c Gravity : No ensity : No pressure : not	ACGIH NIOSH OSHA Z1 OSHA Z1A MX OEL MX OEL t applicable t determined t established applicable
	3.5 mg/m3 3.5 mg/m3 0.1 mg/m3 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 7 mg/m3 9. PHYSIC : solid : pelle : BLA : very : Not o	Time Weighted Average (TWA): Recommended exposure limit (REL): Recommended exposure limit (REL): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	PERTIES ation rate : No c Gravity : No ensity : No pressure : not density : not	ACGIH NIOSH NIOSH OSHA Z1 OSHA Z1A MX OEL MX OEL

10. STABILITY AND REACTIVITY

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Stability	:	Stable
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Strong acids, oxidizing and reducing 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.

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). 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.

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	: not applicable
	13. DISPOSAL CONSIDERATIONS
Product	: Like most thermoplastic plastics 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 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	: Refer to specific regulation.
IMO / IMDG (maritime)	: Refer to specific regulation.
	15. REGULATORY INFORMATION
US Regulations:	

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TSCA Status	:	All components of this product are listed on or exempt from the TSCA Inventory.
US. EPA CERCLA Hazardous	Sub	stances (40 CFR 302)
not applicable		
California Proposition 65	:	WARNING! This product contains a chemical known to the State of California to cause cancer.
SARA Title III Section 302 Ext	rem	ely Hazardous Substance
Unless specific chemicals are id	lenti	fied under this section, this product is Not Applicable under this regulat
SARA Title III Section 313 Tox	tic C	Chemicals:
Unless specific chemicals are id	lenti	fied under this section, this product is Not Applicable under this regulat
Canadian Regulations:		
National Pollutant Relea	se I	nventory (NPRI)
not applicable		
WHMIS Classification	:	D2A
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
Philippines PICCS	:	Listed
		16. OTHER INFORMATION

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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.