MATERIAL SAFETY DATA SHEET

X PK-1482303 Natural

Version Number 1.0 Revision Date 07/13/2009 Page 1 of 6 Print Date 1/8/2012

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 PK-1482303 Natural
Product code	:	EM10018013
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Carbon	7440-44-0	5 - 10
Graphite	7782-42-5	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 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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MATERIAL SAFETY DATA SHEET X PK-1482303 Natural

Version Number 1.0 Revision Date 07/13/2009 Page 2 of 6 Print Date 1/8/2012

		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 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
Flammable Limits		
Upper explosion limit	•	not applicable
Lower explosion limit	:	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

2/6

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MATERIAL SAFETY DATA SHEET X PK-1482303 Natural

Version Number 1.0 Revision Date 07/13/2009

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Page 3 of 6 Print Date 1/8/2012

8.]	EXPOSURE	CONTROLS/PERSO)NAL I	PROTECTION	
Respiratory protection	: N	o personal respiratory j	protecti	ve equipment normally	required.
Eye/Face Protection	: Sa	afety glasses with side-	shields		
Hand protection	: Pı	otective gloves			
Skin and body protection	: Long sleeved clothing				
Additional Protective Measures	: Safety shoes				
General Hygiene Considerations				industrial hygiene and eaks and at the end of w	
Engineering measures		eat only in areas with a propriate exhaust vent		ate exhaust ventilation. at machinery.	Provide
	Value	Exposure time		Exposure type	L ist:
Components	Value 2 mg/m3	Exposure time Time Weighted Ave	erage	Exposure type Respirable fraction.	List: ACGIH
Components	2 mg/m3	Time Weighted Ave (TWA):	-	Respirable fraction.	ACGIH
Components		Time Weighted Ave	-		
Components	2 mg/m3	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave	osure	Respirable fraction.	ACGIH NIOSH
Components	2 mg/m3 2.5 mg/m3	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave	osure erage	Respirable fraction. Respirable.	ACGIH NIOSH
Components	2 mg/m3 2.5 mg/m3 2.5 mg/m3	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave (TWA): Time Weighted Ave	osure erage erage	Respirable fraction. Respirable.	ACGIH NIOSH OSHA Z1A
Components	2 mg/m3 2.5 mg/m3 2.5 mg/m3 2 mg/m3 10 mg/m3 5 mg/m3	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave (TWA):	osure erage erage	Respirable fraction. Respirable.	ACGIH NIOSH OSHA Z1A MX OEL
Exposure limit(s) Components Graphite	2 mg/m3 2.5 mg/m3 2.5 mg/m3 2 mg/m3 10 mg/m3	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave (TWA): Time Weighted Ave (TWA):	osure erage erage	Respirable fraction. Respirable. Respirable dust.	ACGIH NIOSH OSHA Z1A MX OEL MX OEL
Components	2 mg/m3 2.5 mg/m3 2.5 mg/m3 2 mg/m3 10 mg/m3 5 mg/m3 15 mg/m3	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave (TWA): Time Weighted Ave (TWA): PEL:	osure erage erage erage	Respirable fraction. Respirable. Respirable dust. Respirable fraction. Total dust.	ACGIH NIOSH OSHA Z1A MX OEL MX OEL OSHA Z1
Components Graphite	2 mg/m3 2.5 mg/m3 2.5 mg/m3 2 mg/m3 10 mg/m3 5 mg/m3 15 mg/m3	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave (TWA): Time Weighted Ave (TWA): PEL: PEL:	osure orage orage orage	Respirable fraction. Respirable dust. Respirable fraction. Total dust. PERTIES	ACGIH NIOSH OSHA Z1A MX OEL MX OEL OSHA Z1
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Components Graphite	2 mg/m3 2.5 mg/m3 2.5 mg/m3 2 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : solid : pellet : NO F	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave (TWA): Time Weighted Ave (TWA): PEL: PEL: PEL: SAL AND CHEMICA	erage erage erage L PRO Evapor Specifi Bulk d	Respirable fraction. Respirable. Respirable dust. Respirable fraction. Total dust. PERTIES ration rate : Notes the second s	ACGIH NIOSH OSHA Z1A MX OEL MX OEL OSHA Z1 OSHA Z1
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Components	2 mg/m3 2.5 mg/m3 2.5 mg/m3 2 mg/m3 10 mg/m3 5 mg/m3 15 mg/m3 9. PHYSIC : solid : pellet : NO F : very : : Not c	Time Weighted Ave (TWA): Recommended expo limit (REL): Time Weighted Ave (TWA): Time Weighted Ave (TWA): Time Weighted Ave (TWA): PEL: PEL: PEL: SAL AND CHEMICA	erage erage erage L PRO Evapor Specifi Bulk d Vapou	Respirable fraction. Respirable. Respirable dust. Respirable fraction. Total dust. PERTIES ration rate : Notice Gravity respiration rate : Notice Gravity	ACGIH NIOSH OSHA Z1A MX OEL MX OEL OSHA Z1 OSHA Z1

PolyOne

MATERIAL SAFETY DATA SHEET X PK-1482303 Natural

Version Number 1.0 Revision Date 07/13/2009 Page 4 of 6 Print Date 1/8/2012

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
7440-44-0	Carbon	Systemic effects	Respiratory system, heart or
			circulatory system.
7782-42-5	Graphite	Systemic effects	Respiratory system, heart or
			circulatory system.

	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	3. 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.

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MATERIAL SAFETY DATA SHEET X PK-1482303 Natural

Version Number 1.0 Revision Date 07/13/2009 Page 5 of 6 Print Date 1/8/2012

	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:	
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	as Substances (40 CFR 302)
not applicable	
California Proposition 65	n : Not applicable
65	n : Not applicable Extremely Hazardous Substance
65 SARA Title III Section 302 E	
65 SARA Title III Section 302 E	Extremely Hazardous Substance
65 SARA Title III Section 302 E Unless specific chemicals are	Extremely Hazardous Substance identified under this section, this product is Not Applicable under this regulation
65 SARA Title III Section 302 E Unless specific chemicals are SARA Title III Section 313 T	Extremely Hazardous Substance identified under this section, this product is Not Applicable under this regulation
65 SARA Title III Section 302 E Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are	Extremely Hazardous Substance identified under this section, this product is Not Applicable under this regulati Soxic Chemicals:
65 SARA Title III Section 302 E Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Canadian Regulations:	Extremely Hazardous Substance identified under this section, this product is Not Applicable under this regulati Soxic Chemicals:
65 SARA Title III Section 302 E Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Canadian Regulations:	Extremely Hazardous Substance identified under this section, this product is Not Applicable under this regulati 'oxic Chemicals: identified under this section, this product is Not Applicable under this regulati
65 SARA Title III Section 302 E Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Canadian Regulations: National Pollutant Rel	Extremely Hazardous Substance identified under this section, this product is Not Applicable under this regulati 'oxic Chemicals: identified under this section, this product is Not Applicable under this regulati ease Inventory (NPRI)

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MATERIAL SAFETY DATA SHEET X PK-1482303 Natural

Version Number 1.0 Revision Date 07/13/2009 Page 6 of 6 Print Date 1/8/2012

National Inventories:

Australia AICS	: Not determined
China IECS	: Not determined
Europe EINECS	: Listed
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.