MATERIAL SAFETY DATA SHEET

X PP-1601601 Black Version Number 1.1

Revision Date 03/23/2014

Page 1 of 7 Print Date 3/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	X PP-1601601 Black
Product code	:	EM10021865
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Glass, oxide	65997-17-3	10 - 30
Carbon black	1333-86-4	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, Eyes, 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.		
Skin	: Avoid skin contact. Product contains unreacted organic peroxides which may cause mild skin irritation.		

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MATERIAL SAFETY DATA SHEET X PP-1601601 Black

Version Number 1.1 Revision Date 03/23/2014 Page 2 of 7 Print Date 3/31/2014

Medical Conditions: Individuals with chronic respiratory disorders (i.e. asthma, chroni bronchitis, etc.) may be adversely affected by any airborne contaminant.		
	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. FIREFIGHTING MEASURES	
Flash point	: not applicable	
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media	 not applicable not applicable Not relevant Carbon dioxide blanket, Water spray, Dry powder, Foam. 	
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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.	
	7. HANDLING AND STORAGE	



MATERIAL SAFETY DATA SHEET X PP-1601601 Black

ion Number 1.1 sion Date 03/23/2014		Page 3 Print Date 3/31/2
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. Keep away from heat. Excessive storage temperature and humidity can degrade product performance. Store below 149 °F (65 °C). Rotate stock. Product shelf life is normally 1 year maximum.
8. EX	POSU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required when handling the product itself. See "Engineering Measures" section below for precautions to be taken when heating or processing this material.
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. During processing and cross-linking, product can give off by-products such as alcohols, acetophenone, alpha-methylstyrene, acetone, methane, and ethane. By-product vapors may be flammable. User must provide necessary precautions such as adequate ventilation to prevent accumulation and ignition of vapors. Adequate ventilation and/or appropriate respiratory protection may also be necessary to minimize employee exposure to processing vapors.
Exposure limit(s)		

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MATERIAL SAFETY DATA SHEET X PP-1601601 Black

Version Number 1.1 Revision Date 03/23/2014 Page 4 of 7 Print Date 3/31/2014

Components	Value	Exposure time	Exposure type	List:
Carbon black	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
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- solid
 pellets
 BLACK
 characteristic
 Not determined
 not applicable
 insoluble
- Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- Not applicable
 Not determined
 Not established
 not applicable
 not applicable
 not applicable

Water solubility

10. STABILITY AND REACTIVITY

Stability	:	The product is stable if stored and handled as prescribed.
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	:	Strong acids, Oxidizing agents, Reducing agents
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Traces of alcohols, acetophenone, alpha-methylstyrene, acetone, methane, ethane, or other byproducts may be liberated during processing or decomposition.

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:

MATERIAL SAFETY DATA SHEET X PP-1601601 Black

Version Number 1.1 Revision Date 03/23/2014 Page 5 of 7 Print Date 3/31/2014

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

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.

	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	: 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	: 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
	: Not regulated for transportation.
U.S. DOT Classification	

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MATERIAL SAFETY DATA SHEET X PP-1601601 Black

Version Number 1.1 Revision Date 03/23/2014 Page 6 of 7 Print Date 3/31/2014

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 Hazardous	Substances (40 CFR 302)
not applicable	
California Proposition 65	: Not applicable
SARA Title III Section 302 Ext	remely Hazardous Substance
Unless specific chemicals are id	entified under this section, this product is Not Applicable under this regulation
SARA Title III Section 313 Tox	ic Chemicals:
Unless specific chemicals are id	entified under this section, this product is Not Applicable under this regulation
Canadian Regulations:	
National Pollutant Relea	se Inventory (NPRI)
not applicable	
WHMIS Classification	: D2A
WHMIS Ingredient Disc	losure List
CAS-No. 1333-86-4	
DSL	: All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.
National Inventories:	

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MATERIAL SAFETY DATA SHEET X PP-1601601 Black

Version Number 1.1 Revision Date 03/23/2014 Page 7 of 7 Print Date 3/31/2014

Not determined
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.