PolvOne

## MATERIAL SAFETY DATA SHEET **BLACK**

Version Number 1.0 Revision Date 07/01/2009

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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	:	BLACK
Product code	:	CC10122978
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

#### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Titanium dioxide	13463-67-7	0.1 - 1
Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	8007-18-9	1 - 5
Carbon black	1333-86-4	1 - 5

#### 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.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

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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 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 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	<ul><li>not applicable</li><li>not applicable</li></ul>
Autoignition temperature Suitable extinguishing media	<ul><li>not applicable</li><li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li></ul>
Special Fire Fighting Procedures	: Fullface self-contained breathing apparatus (SCBA) used in positiv 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 n 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



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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	POSUI	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.
Exposure limit(s)		

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Components	Value	Exposure time	Exposure type	List:
Nickel antimony	0.015	Recommended exposure	as Ni	NIOSH
yellow rutile (C.I.	mg/m3	limit (REL):		
Pigment Yellow 53)				
	1 mg/m3	PEL:	as Ni	OSHA Z1
	1 mg/m3	Time Weighted Average (TWA):	as Ni	OSHA Z1A
	0.2 mg/m3	Time Weighted Average (TWA):	Inhalable fraction. as Ni	ACGIH
	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
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
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

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range Boiling Point: : solid
: pellets
: BLACK
: very faint
: Not determined
: not applicable

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH Not applicable
Not determined
Not established
not applicable
not applicable
not applicable

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Water solubility	: insoluble
	10. STABILITY AND REACTIVITY
Stability	: Stable
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	: Incompatible with strong acids and oxidizing 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.

<u>Toxicity Overview</u> This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
8007-18-9	Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	Irritant	Eyes, Skin.
		sensitizer	Skin.
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
13463-67-7	Titanium dioxide	no	2B	no
8007-18-9	Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	no	1	no
1333-86-4	Carbon black	no	2B	no

IARC Carcinogen Classifications:

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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:

Nickel antimony yellow rutile (C.I. Pigment Yellow 53) 8007-18-9 Skin sensitizer "nickel itch", with pulmonary, brain, liver, kidney and muscle effects.

#### 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	: no data available
	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.

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	14. TRANSPO	RT INFORMATIO	DN	
U.S. DOT Classification	: Not regulated	for transportation.		
ICAO/IATA	: Refer to speci	ific regulation.		
IMO / IMDG (maritime)	: Refer to speci	ific regulation.		
	15. REGULATO	ORY INFORMATI	ION	
US Regulations:				
OSHA Status	: Classified as l	hazardous based on	components.	
TSCA Status	: All compone TSCA Invento	nts of this product a ory.	re listed on or exe	empt from the
US. EPA CERCLA Hazardo	us Substances (40 CFI	R 302)		
not applicable				
California Propositio		This product contai	ins a chemical kno	own to the State of
California Proposition 65	n : WARNING! California to c		ins a chemical kno	own to the State of
65	California to o	cause cancer.	ins a chemical kno	own to the State of
65 SARA Title III Section 302 I	California to o Extremely Hazardous 3	cause cancer. Substance		
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65 SARA Title III Section 302 I Unless specific chemicals are SARA Title III Section 313 T	California to o Extremely Hazardous a e identified under this Foxic Chemicals: e identified under this	cause cancer. Substance section, this produc section, this produc CAS-N	t is Not Applicabl t is Not Applicabl No. Weig	le under this regula
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WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
8007-18-9	
1333-86-4	

:

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS	:	Not determined
China IECS	:	Listed
Europe EINECS	:	Not determined
Japan ENCS	:	Not determined
Korea KECI	:	Listed
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.