

MATERIAL SAFETY DATA SHEET **050BN403**

Version Number 1.2 Revision Date 09/25/2003

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE	:	Product Stewardship (770) 271-5902
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	050BN403
Product code	:	CC10004730
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	1 - 5
Iron oxide	1309-37-1	1 - 5
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 Ingestion Eyes Skin	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to eyes. Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.



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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 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 seel medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 Not applicable Not applicable Not relevant Carbon dioxide blanket, water spray, dry powder, foamnone. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. None
	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 13 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE
Handling	: Take measures to prevent the build up of electrostatic charge Heat



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	01	nly in areas with appropriate e	exhaust ventilation			
	01	iry in areas with appropriate c	canadist ventilation.			
Storage		eep containers dry and tightly		absorption		
	ar	nd contamination. Keep in a d	dry, cool place.			
8.1	EXPOSURE	CONTROLS / PERSONAL	PROTECTION			
Respiratory protection	: N	o personal respiratory protect	ive equipment normally r	equired.		
Eye/Face Protection	: Sa	: Safety glasses with side-shields.				
Hand protection	: P1	: Protective gloves. Refer to equipment supplier to ensure protection.				
Skin and body protection	: L	: Long sleeved clothing.				
	C	6				
Additional Protective Measures	: 58	afety shoes.				
General Hygiene	: H	andle in accordance with good	d industrial hygiene and sa	afety practice		
Considerations		ash hands before breaks and		net, product		
				~		
Engineering measures		eat only in areas with appropriation		Provide		
	ar	opropriate exhaust ventilation	at machinery.			
-						
Exposure limit(s)						
<u>O</u>	Value	Europunationa	E			
Components	value	Exposure time	Exposure type	List:		
Components Carbon black	3.5 mg/m3	Exposure time Time Weighted Average	Exposure typeTotal dust. as carbon	List: ACGIH		
<u> </u>	3.5 mg/m3	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH		
<u> </u>		Time Weighted Average	Total dust. as carbon black Total dust. as carbon	ACGIH		
Carbon black	3.5 mg/m3 3.5 mg/m3	Time Weighted Average (TWA): PEL:	Total dust. as carbon black Total dust. as carbon black	ACGIH OSHA Z1		
<u> </u>	3.5 mg/m3	Time Weighted Average (TWA): PEL: Time Weighted Average	Total dust. as carbon black Total dust. as carbon	ACGIH		
Carbon black Iron oxide	3.5 mg/m3 3.5 mg/m3 5 mg/m3	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA):	Total dust. as carbon black Total dust. as carbon black	ACGIH OSHA Z1 ACGIH		
Carbon black	3.5 mg/m3 3.5 mg/m3	Time Weighted Average (TWA): PEL: Time Weighted Average	Total dust. as carbon black Total dust. as carbon black	ACGIH OSHA Z1		
Carbon black Iron oxide	3.5 mg/m3 3.5 mg/m3 5 mg/m3	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average	Total dust. as carbon black Total dust. as carbon black	ACGIH OSHA Z1 ACGIH ACGIH		
Carbon black Iron oxide	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL:	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust.	ACGIH OSHA Z1 ACGIH ACGIH		
Carbon black Iron oxide	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA):	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust.	ACGIH OSHA Z1 ACGIH ACGIH		
Carbon black Iron oxide	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust.	ACGIH OSHA Z1 ACGIH ACGIH		
Carbon black Iron oxide Titanium dioxide	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust. OPERTIES oration rate : Not	ACGIH OSHA Z1 ACGIH ACGIH OSHA Z1		
Carbon black Iron oxide Titanium dioxide Form	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust. Total dust. OPERTIES pration rate : Not fic Gravity : Not	ACGIH OSHA Z1 ACGIH ACGIH OSHA Z1 applicable.		
Carbon black Iron oxide Titanium dioxide Form Appearance	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not	ACGIH OSHA Z1 ACGIH ACGIH OSHA Z1 applicable. determined		
Carbon black Iron oxide Titanium dioxide Form Appearance Color Odor	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : BRO : Very	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO ts Specifi WN Bulk of faint Vapor	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not opensity : Not opensure : Not	ACGIH OSHA Z1 ACGIH ACGIH OSHA Z1 applicable. determined established applicable		
Carbon black Iron oxide Titanium dioxide Form Appearance Color	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : BRO : Very : Not c	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO ts Specifi WN Bulk of faint Vapor letermined Vapor	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not orationsity : Not orationsity : Not orationsity : Not	ACGIH OSHA Z1 ACGIH ACGIH OSHA Z1 applicable. determined established		
Carbon black Iron oxide Titanium dioxide Form Appearance Color Odor Melting point/range	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : BRO : Very : Not c	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO ts Specified WN Bulk of faint Vapor letermined Vapor pplicable pH	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not orationsity : Not orationsity : Not orationsity : Not	ACGIH OSHA Z1 ACGIH ACGIH OSHA Z1 oSHA Z1 determined established applicable applicable		
Carbon black Iron oxide Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point:	3.5 mg/m3 3.5 mg/m3 5 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : BRO : Very : Not a : Insol	Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO ts Specified WN Bulk of faint Vapor letermined Vapor pplicable pH	Total dust. as carbon black Total dust. as carbon black Dust and fume. as Fe Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not oration rate : Not in density : Not : Not	ACGIH OSHA Z1 ACGIH ACGIH OSHA Z1 oSHA Z1 applicable. determined established applicable applicable		



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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.

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.
1309-37-1	Iron oxide	Systemic effects	Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	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). 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 matrix of the polymer.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the matrix of the polymer.
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 materia 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 (air)	: Refer to specific regulation.
IMO / IMDG (maritime)	: Refer to specific regulation.
	15. REGULATORY INFORMATION
US Regulations:	
OSHA Status	: Classified as hazardous based on components.



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TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.
US. EPA CERCLA Hazardo	us Substances (40 CFR 302)
Not applicable	
California Propositio 65	n : WARNING! This product contains a chemical known to the State of California to cause cancer.
SARA Title III Section 302 I	Extremely Hazardous Substance
Not applicable	
SARA Title III Section 313	Foxic Chemicals:
Not applicable Canadian Regulations:	
National Pollutant Re	lease Inventory (NPRI)
Not applicable	
WHMIS Classification	on : D2A
WHMIS Ingredient D	Visclosure List
CAS-No. 1333-86-4 1309-37-1	
DSL	: All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.
National Inventories:	
	: Listed
Australia AICS	
Australia AICS China IECS	: Listed
	: Listed
China IECS	



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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.

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