

MATERIAL SAFETY DATA SHEET

MIDNIGHT BLUE

Version Number 1.0 Revision Date 03/04/2002 Page 1 of 6 Print Date 11/3/2011

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	:	MIDNIGHT BLUE
Product code	:	CC10011763
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	1 - 5
Titanium dioxide	13463-67-7	5 - 10

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some fumes may be released upon heating or crosslinking and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect his employee from exposure. See Sections 3 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation Ingestion Eyes	 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.
Skin	: 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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	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 a least 15 minutes. If eye irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists see medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition 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. 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 no 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 1 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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Carbon black 3.5 mg/m3 Time Weighted Average (TWA): Total dust. as carbon black ACC 3.5 mg/m3 PEL: Total dust. as carbon black OSH/ black Titanium dioxide 10 mg/m3 Time Weighted Average (TWA): Total dust. ACC 15 mg/m3 PEL: Total dust. ACC 9. PHYSICAL AND CHEMICAL PROPERTIES OSH/ Form : Solid Evaporation rate : Not applicat Appearance : Pellets Specific Gravity : Not determinic Color : BLUE Bulk density : Not applicat Melting point/range : Not determined Vapor density : Not applicat Boiling Point: : Not applicable pH : Not applicat Boiling Point: : Not applicable pH : Not applicat Boiling Point: : Stability : Insoluble : Not applicat Hazardous Polymerization : Will not occur. : Will not occur. : :	ion Number 1.0 sion Date 03/04/2002			Print I	Page 3 Date 11/3/2
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 : Safety shoes. Measures : Handle in accordance with good industrial hygiene and safety pra Considerations : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. Exposure limit(s) : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. Exposure limit(s) : : Total dust. as carbon ACC (TWA): Dlack : : : 3.5 mg/m3 PEL: : Total dust. Titanium dioxide 10 mg/m3 Pine: Way: : OSH/ Solid : : : Not applicat Persuic AL AND CHEMICAL PROPERTIES : Not applicat Solid : : : Not applicat Odor : : : Not		ar	nd contamination. Keep in a c	lry, cool place.	
Eye/Face Protection :: Safety glasses with side-shields. Hand protection :: Protective gloves. Skin and body protection :: Long sleeved clothing. Additional Protective :: Safety shoes. Measures : General Hygiene :: General Hygiene :: Handle in accordance with good industrial hygiene and safety practions Considerations : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. Exposure limit(s) : Exposure time Exposure type Lis Components Value Exposure time Exposure type Lis Carbon black 3.5 mg/m3 Time Weighted Average Total dust. as carbon OSH/ Titanium dioxide 10 mg/m3 Time Weighted Average Total dust. OSH/ Solid : : Total dust. OSH/ Odor : BLUE Bulk density : Not applicat Appearance : Pellets Specific Gravity : Not establis Odor : BLUE Bulk density <td>8. E</td> <td>XPOSURE</td> <td>CONTROLS / PERSONAL</td> <td>PROTECTION</td> <td></td>	8. E	XPOSURE	CONTROLS / PERSONAL	PROTECTION	
Hand protection : Protective gloves. Skin and body protection : Long sleeved clothing. Additional Protective : Safety shoes. Measures : Safety shoes. General Hygiene : Handle in accordance with good industrial hygiene and safety praconsiderations 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) : : texposure time Components Value Exposure time Exposure type Carbon black 3.5 mg/m3 Time Weighted Average Total dust. as carbon OSH/ Titanium dioxide 10 mg/m3 Time Weighted Average Total dust. ACC (TWA): istack 0SH/ Istack : Total dust. OSH/ Diack 10 mg/m3 PEL: Total dust. OSH/ Octor : Stagety faint Vapor pressure Not applicat Appearance : Pellets Specific Gravity : Not a	Respiratory protection	: N	o personal respiratory protect	ive equipment normally r	equired.
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9. PHYSICAL AND CHEMICAL PROPERTIES Form : Solid Evaporation rate : Not applicab Appearance : Pellets Specific Gravity : Not determin Color : BLUE Bulk density : Not establish Odor : Very faint Vapor pressure : Not applicab Melting point/range : Not determined Vapor density : Not applicab Boiling Point: : Not applicable pH : Not applicab Water solubility : Insoluble Insoluble Insoluble Id. STABILITY AND REACTIVITY Stability : Stable. Hazardous Polymerization : Will not occur.	Titanium dioxide	10 mg/m3	0 0	Total dust.	ACGIH
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Hazardous Polymerization : Will not occur.		10. S	TABILITY AND REACTIV	/ITY	
	Stability	: St	table.		
Conditions to avoid . Keep away from oxidizing agents and open flame. To avoid the	Hazardous Polymerizatior	1 : W	/ill not occur.		
Conditions to avoid . Reep away from Oxidizing agents and open frame. To avoid the	Conditions to avoid	: K	eep away from oxidizing ager	nts and open flame. To a	void thermal



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		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.
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 thermoplastics 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. D.O.T. / CA T.D.G. Classification (Non-bulk ground)	: Not regulated for transportation.
ICAO/IATA	: Not regulated for transportation.
IMO / IMDG	: Not regulated for transportation.
	15. REGULATORY INFORMATION
US Regulations:	
es regulations.	



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OSHA Status	:	Classified as hazardous based on components.
TSCA Status	:	All components of this product are listed on the TSCA inventory or are exempt.
California Proposition 65	:	This product does not contain a substance listed by California Prop 65.
Canadian Regulations:		
WHMIS Classification	:	D2B
WHMIS Ingredient Discl	osu	re List
CAS-No. 1333-86-4 7631-86-9		
DSL	:	Listed.
National Inventories:		
Australia AICS	:	Not determined.
China IECS	:	Not determined.
Europe EINECS	:	Not determined.
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.