

MATERIAL SAFETY DATA SHEET

## **TURQUOISE METALLIC**

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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	:	TURQUOISE METALLIC
Product code	:	CC10013996
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	0.1 - 1
Tin oxide (SnO2)	18282-10-5	0.1 - 1
Zinc stearate	557-05-1	0.1 - 1
Titanium dioxide	13463-67-7	5 - 10
Mica	12001-26-2	10 - 30

#### **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 employees from exposure. See Sections 3 and 11 for special precautions.

### POTENTIAL HEALTH EFFECTS

<b>Routes of Exposure:</b>	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation Ingestion Eyes	<ul> <li>Resin particles, like other inert materials, can be mechanically irritating.</li> <li>May be harmful if swallowed.</li> <li>Resin particles, like other inert materials, are mechanically irritating to eyes.</li> </ul>
Skin	: 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	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not relevant</li> <li>Carbon dioxide blanket, Water spray, dry powder, foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive</li> </ul>
Procedures Unusual Fire/Explosion Hazards	<ul><li>pressure mode should be worn to prevent inhalation of airborne contaminants.</li><li>None</li></ul>
	5. 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 12 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	xhaust ventilation.		
Storage		eep containers dry and tightly nd contamination. Keep in a c		e absorption	
8. F	XPOSURE	CONTROLS / PERSONAL	PROTECTION		
Respiratory protection	: N	o personal respiratory protect	ive equipment normally 1	required.	
Eye/Face Protection	: Sa	afety glasses with side-shields			
Hand protection	: P1	rotective gloves.			
Skin and body protection	: L	ong sleeved clothing.			
Additional Protective Measures	: Sa	afety shoes.			
General Hygiene Considerations		andle in accordance with good ash hands before breaks and a		afety practice	
Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.					
Engineering measures				Provide	
Engineering measures Exposure limit(s)				Provide	
Exposure limit(s)	aŗ	opropriate exhaust ventilation	at machinery.		
		Exposure time Time Weighted Average		Provide List: ACGIH	
Exposure limit(s) Components	ar Value	ppropriate exhaust ventilation Exposure time	at machinery. Exposure type Total dust. as carbon	List:	
Exposure limit(s) Components Carbon black	ap Value 3.5 mg/m3	Exposure time Time Weighted Average (TWA):	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon	List: ACGIH	
Exposure limit(s) Components Carbon black Carbon black	ap Value 3.5 mg/m3 3.5 mg/m3	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black	List: ACGIH OSHA Z1	
Exposure limit(s) Components Carbon black Carbon black Mica	ap Value 3.5 mg/m3 3.5 mg/m3 3 mg/m3	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA):	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black Total dust.	List: ACGIH OSHA Z1 ACGIH	
Exposure limit(s) Components Carbon black Carbon black Mica Mica	ap Value 3.5 mg/m3 3.5 mg/m3 3 mg/m3 20 mppcf	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black Total dust. Total dust.	List: ACGIH OSHA Z1 ACGIH OSHA	
Exposure limit(s) Components Carbon black Carbon black Mica Mica Titanium dioxide	ap Value 3.5 mg/m3 3.5 mg/m3 3 mg/m3 20 mppcf 10 mg/m3 15 mg/m3	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL:	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black Total dust. Total dust. Total dust. Total dust.	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH	
Exposure limit(s)         Components         Carbon black         Carbon black         Mica         Titanium dioxide         Titanium dioxide	ap Value 3.5 mg/m3 3.5 mg/m3 3 mg/m3 20 mppcf 10 mg/m3 15 mg/m3 <b>9. PHYSIC</b>	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black Total dust. Total dust. Total dust. Total dust. DPERTIES	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH OSHA Z1	
Exposure limit(s) Components Carbon black Carbon black Mica Mica Titanium dioxide Titanium dioxide Form	ap Value 3.5 mg/m3 3.5 mg/m3 3 mg/m3 20 mppcf 10 mg/m3 15 mg/m3 9. PHYSIC : Solid	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR(	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black Total dust. Total dust. Total dust. Total dust. DPERTIES ration rate : Not	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH OSHA Z1 applicable.	
Exposure limit(s)  Components Carbon black Carbon black Mica Mica Titanium dioxide Titanium dioxide Form Appearance	ap Value 3.5 mg/m3 3.5 mg/m3 3 mg/m3 20 mppcf 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO L Evapo ts Specifi	at machinery.          Exposure type         Total dust. as carbon         black         Total dust. as carbon         black         Total dust. as carbon         black         Total dust.         DPERTIES         ration rate       : Not         ic Gravity       : Not	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH OSHA Z1 applicable. determined	
Exposure limit(s)  Components Carbon black Carbon black Mica Mica Titanium dioxide Titanium dioxide Form Appearance Color	ap Value 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 3 mg/m3 20 mppcf 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : BLU	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO L Evapo ts Specif E Bulk d	at machinery.          Exposure type         Total dust. as carbon         black         Total dust. as carbon         black         Total dust. as carbon         black         Total dust.         Yotal dust.         Total dust.         Total dust.         Yotal dus	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH OSHA Z1 applicable. determined established	
Exposure limit(s)  Components Carbon black Carbon black Mica Mica Titanium dioxide Titanium dioxide Form Appearance Color Odor	Value 3.5 mg/m3 3.5 mg/m3 3.5 mg/m3 3 mg/m3 20 mppcf 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : BLU : Very	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRC L Evapo ts Specifi E Bulk d faint Vapor	at machinery.          Exposure type         Total dust. as carbon         black         Total dust. as carbon         black         Total dust. as carbon         black         Total dust.         DPERTIES         ration rate       : Not         lensity       : Not         pressure       : Not	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH OSHA Z1 oSHA Z1	
Exposure limit(s)  Components Carbon black Carbon black Mica Mica Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range	Value         3.5 mg/m3         3.5 mg/m3         3.5 mg/m3         3 mg/m3         20 mppcf         10 mg/m3         15 mg/m3         9. PHYSIC         : Solid         : Pelle         : BLU         : Very         : Not complexity	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO L Evapo ts Specif E Bulk d faint Vapor letermined Vapor	at machinery.          Exposure type         Total dust. as carbon         black         Total dust. as carbon         black         Total dust. as carbon         black         Total dust.         DPERTIES         ration rate       : Not         lensity       : Not         pressure       : Not         density       : Not	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH OSHA Z1 OSHA Z1 applicable. determined established applicable applicable	
Exposure limit(s)  Components Carbon black Carbon black Mica Mica Titanium dioxide Titanium dioxide Form Appearance Color Odor	Value         3.5 mg/m3         3.5 mg/m3         3.5 mg/m3         3 mg/m3         20 mppcf         10 mg/m3         15 mg/m3         9. PHYSIC         : Solid         : Pelle         : BLU         : Very         : Not complexity	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRC L Evapo ts Specifi E Bulk d faint Vapor	at machinery.          Exposure type         Total dust. as carbon         black         Total dust. as carbon         black         Total dust. as carbon         black         Total dust.         DPERTIES         ration rate       : Not         lensity       : Not         pressure       : Not         density       : Not	List: ACGIH OSHA Z1 ACGIH OSHA ACGIH OSHA Z1 oSHA Z1	

## **10. STABILITY AND REACTIVITY**

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Page 4 of 7 Version Number 1.0 Print Date 11/4/2011 Revision Date 04/08/2002 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 : Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen products (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.
18282-10-5	Tin oxide (SnO2)	Systemic effects	Respiratory system.
557-05-1	Zinc stearate	Systemic effects	Eyes, Skin, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
12001-26-2	Mica	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
18282-10-5	Tin oxide (SnO2)	Oral LD50	> 20 gm/kg	rat
557-05-1	Zinc stearate	Oral LD50	> 10 gm/kg	rat

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:



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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:

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	3. 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 material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	1	4. 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.



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	15	5. REGULATORY INFORMATION
US Regulations:		
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 Dis	closu	ire List
CAS-No. 1333-86-4 12001-26-2 18282-10-5 557-05-1		
DSL	:	Listed.
National Inventories:		
Australia AICS	:	Listed.
China IECS	:	Listed.
Europe EINECS	:	Not determined.
Japan ENCS	:	Not determined.
Korea KECI	:	Listed.
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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