

## MATERIAL SAFETY DATA SHEET

## GRAY

Version Number 1.0  
Revision Date 11/18/2002

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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 : GRAY  
Product code : CC10026059  
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
Cellulose	9004-34-6	5 - 10
Zinc stearate	557-05-1	10 - 30
Mica	12001-26-2	30 - 60

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

#### POTENTIAL HEALTH EFFECTS

**Routes of Exposure:** : Inhalation, Skin contact, Ingestion

#### Acute exposure

Inhalation : Resin particles, like other inert materials, can be mechanically irritating.  
Ingestion : May be harmful if swallowed.  
Eyes : Particulates, like other inert materials can be mechanically irritating.  
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** : None known.  
**Aggravated by Exposure:**

**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 seek medical attention.

**5. FIRE-FIGHTING MEASURES**

**Flash point** : Not applicable

**Flammable Limits**

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

**Autoignition temperature** : Not relevant

**Suitable extinguishing media** : Carbon dioxide blanket, Water spray, dry powder, foam.

**Special Fire Fighting Procedures** : Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.

**Unusual Fire/Explosion Hazards** : 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 only in areas with appropriate exhaust ventilation.

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Storage : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Respiratory protection : No personal respiratory protective equipment normally required. If dusty conditions occur wear appropriate respiratory protection.

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)

Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH
Carbon black	3.5 mg/m <sup>3</sup>	PEL:	Total dust. as carbon black	OSHA Z1
Cellulose	10 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Total dust.	ACGIH
Cellulose	5 mg/m <sup>3</sup>	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m <sup>3</sup>	PEL:	Total dust.	OSHA Z1
Mica	3 mg/m <sup>3</sup>	Time Weighted Average (TWA):	Total dust.	ACGIH
Mica	20 mppcf	PEL:	Total dust.	OSHA
Zinc stearate	5 mg/m <sup>3</sup>	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m <sup>3</sup>	PEL:	Total dust.	OSHA Z1
Zinc stearate	10 mg/m <sup>3</sup>	Time Weighted Average (TWA):	as stearates	ACGIH

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	: Solid	Evaporation rate	: Not applicable.
Appearance	: powder, granular	Specific Gravity	: Not applicable.
Color	: GREY	Bulk density	: Not determined
Odor	: Very faint	Vapor pressure	: Not applicable

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Melting point/range	: Not determined	Vapor density	: Not applicable
Boiling Point:	: Not applicable	pH	: Not applicable
Water solubility	: Insoluble		

**10. STABILITY AND REACTIVITY**

Stability	: Stable.
Hazardous Polymerization	: Will not occur.
Conditions to avoid	: To avoid thermal decomposition, do not overheat. Keep away from oxidizing agents and open flame.
Incompatible Materials	: Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	: Carbon dioxide (CO <sub>2</sub> ), carbon monoxide (CO), oxides of nitrogen (NO <sub>x</sub> ), 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.
9004-34-6	Cellulose	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
557-05-1	Zinc stearate	Systemic effects	Eyes, Skin, 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 Dermal LD50	> 15,400 mg/kg > 3 gm/kg	rat rabbit
9004-34-6	Cellulose	LC50 Oral LD50 Dermal LD50	> 5800 mg/m <sup>3</sup> > 5 gm/kg > 2 gm/kg	rat rat rabbit
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

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## 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:**

**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 : Adverse ecological impact is not known or expected under normal use.
- Bioaccumulation Potential : Not inherently biodegradable.
- Additional advice : No data available.

**13. DISPOSAL CONSIDERATIONS**

- Product : 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.

**14. TRANSPORT INFORMATION**

- U.S. DOT Classification : Not regulated for transportation.
- ICAO/IATA : Not regulated for transportation.

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IMO / IMDG : Not regulated for transportation.

<b>15. REGULATORY INFORMATION</b>
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## 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 : This product does not contain a substance listed by California Prop 65.

## SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
ZINC COMPOUNDS	557-05-1	11.26

## Canadian Regulations:

WHMIS Classification : D2A

## WHMIS Ingredient Disclosure List

CAS-No.
1333-86-4
12001-26-2
557-05-1

DSL : All of the components of this product are listed on the Canadian Inventories or are exempt. However, at least one component of this product is on the Canadian Non-Domestic Substances List (NDSL). Quantity use in Canada is restricted by regulations.

## National Inventories:

Australia AICS : Listed.

China IECS : Listed.

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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.