PolvOne

MATERIAL SAFETY DATA SHEET

7B31 Dark Gray Concentrate

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	7B31 Dark Gray Concentrate
Product code	:	EM10029725
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Carbon black	1333-86-4	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Calcium carbonate	1317-65-3	10 - 30
Chromium (III) oxide	1308-38-9	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, Eyes, 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	: Avoid skin contact. Product contains unreacted organic peroxides		

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	which may cause mild skin irritation.		
Chronic exposure	: Refer to Section 11 for Toxicological Information.		
Medical Conditions Aggravated by Exposure:	: Individuals with chronic respiratory disorders (i.e. asthma, chronic bronchitis, etc.) may be adversely affected by any airborne contaminant.		
	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 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. FIREFIGHTING MEASURES		
Flash point	: not applicable		
Flammable Limits			
Upper explosion limit	: not applicable		
Lower explosion limit	not applicable		
Auto-ignition 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	: 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 not be allowed to enter drains, water courses or the soil.		

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	7. HANDLING AND STORAGE		
Handling	: Take measures to prevent the build up of electrostatic charge. only in areas with appropriate exhaust ventilation.	Heat	
Storage : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place. Keep away from the Excessive storage temperature and humidity can degrade product performance. Store below 149 °F (65 °C). Rotate stock. Product shelf life is normally 1 year maximum.			
8. EX	SURE CONTROLS/PERSONAL PROTECTION		
Respiratory protection	: No personal respiratory protective equipment normally require handling the product itself. See "Engineering Measures" secti below for precautions to be taken when heating or processing material.	on	
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. Durin processing and cross-linking, product can give off by-product as alcohols, acetophenone, alpha-methylstyrene, acetone, meth and ethane. By-product vapors may be flammable. User must necessary precautions such as adequate ventilation to prevent accumulation and ignition of vapors. Adequate ventilation an appropriate respiratory protection may also be necessary to m employee exposure to processing vapors.	s such hane, provid d/or	

Exposure limit(s)

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Components	Value	Exposure time	Exposure type	List:
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Carbon black	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
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Chromium (III) oxide	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
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: Water solubility
- solid
 pellets
 GREY
 characteristic
 Not determined
 not applicable
 insoluble
- Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- Not applicable
 Not determined
 Not established
 not applicable
 not applicable
 not applicable

10. STABILITY AND REACTIVITY

Stability

: The product is stable if stored and handled as prescribed.

Hazardous Polymerization

: Will not occur.

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Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Strong acids, Oxidizing agents, Reducing agents
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Traces of alcohols, acetophenone, alpha-methylstyrene, acetone, methane, ethane, or other byproducts may be liberated during processing or decomposition.

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.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory
			system.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.

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

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.

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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.

Additional Health Hazard Information:

Chromium (III) oxide 1308-38-9 The bi- and trivalent forms of chrome have a low order of acute toxicity, but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans.

	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	: not applicable
	13. DISPOSAL CONSIDERATIONS
Product	: 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	: 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	: Refer to specific regulation.
IMO/IMDG (maritime)	: Refer to specific regulation.

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15. REGULATORY INFORMATION

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)

Chemical Name	CAS-No.	RQ for component	RQ for
			Mixture/Product
Chromium (III)	1308-38-9	010 lbs	76 LB
oxide			

California Proposition : Not applicable 65

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	Weight percent	
CHROMIUM III COMPOUNDSCHROMIUM	1308-38-9	10.00 - 30.00	
COMPOUNDS			

Canadian Regulations:

National Pollutant Release Inventory (NPRI)			
Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Chromium (III) oxide	1308-38-9	10.00 - 30.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

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CAS-No.					
<u>1333-86-4</u> <u>1308-38-9</u>					
DSL	:	All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.			
National Inventories:					
Australia AICS	:	Listed			
China IECS	:	Listed			
Europe EINECS	:	Listed			
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.