MATERIAL SAFETY DATA SHEET MSDS X150-242-111-04 DARK BROWN

Version Number 1.0 Revision Date 08/08/2003

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE	:	Product Stewardship (440)-930-1395
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	MSDS X150-242-111-04 DARK BROWN
Product code	:	VC10002195
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
Calcium carbonate	471-34-1	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Rutile, antimony chromium buff	68186-90-3	5 - 10

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. See Sections 3 and 11 for additional details. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). OSHA considers VCM a suspect carcinogen and regulates it under 29 CFR 1910.1017. It is unlikely, under normal working conditions with adequate ventilation, that the OSHA action level and the OSHA exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.

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 	



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Skin	eyes. : Experience shows no unusual dermatitis hazard from routine handling	ıg.		
Chronic exposure : Refer to Section 11 for Toxicological Information.				
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 doubt seek medical advice.	of		
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 least 15 minutes. If eye irritation persists, seek medical attention.	at		
Skin	: Wash off with soap and plenty of water. If skin irritation persists se medical attention.	ek		
	5. FIRE-FIGHTING MEASURES			
Flash point	: Not applicable			
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature	 Not applicable Not applicable Not applicable. 			
Suitable extinguishing media	: water, dry powder, foam, carbon dioxide (CO2).			
Special Fire Fighting Procedures	: Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.	e		
Unusual Fire/Explosion Hazards	: May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) und fire conditions.	ler		
	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.	ot		
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material ir	1		



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		7. HANDLING AND STORAGE
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EXP	OSUI	RE CONTROLS / PERSONAL PROTECTION
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 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.



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Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH
Carbon black	3.5 mg/m3	PEL:	Total dust. as carbon black	OSHA Z1
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Calcium carbonate	10 mg/m3	Time Weighted Average (TWA):		ACGIH
Rutile, antimony chromium buff	1 mg/m3	PEL:		OSHA Z1
Rutile, antimony chromium buff	0.5 mg/m3	PEL:	as Sb	OSHA Z1
Rutile, antimony chromium buff	0.5 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
Rutile, antimony chromium buff	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
Titanium dioxide	15 mg/m3	PEL:	Total dust.	OSHA Z1

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odor Melting point/range Boiling Point: Water solubility
- Solid
 Pellets, powder
 BROWN
 Very faint
 Not determined
 Not applicable
 Insoluble
- Evaporation rate Specific Gravity Bulk density Vapor pressure Vapor density pH
- Not applicable.
 Not determined
 Not established
 Not applicable
 Not applicable
 Not applicable

10. STABILITY AND REACTIVITY

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. Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.



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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.
471-34-1	Calcium carbonate	Irritant	Eyes, Skin.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, 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
471-34-1	Calcium carbonate	Oral LD50	6,450 mg/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:

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.

Additional Health Hazard Information:

Rutile, antimony chromium buff 68186-90-3 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

Persistence and degradability	: Not readily biodegradable.			
Environmental Toxicity	: Adverse ecological impact is not known or expected under normal use.			
Environmental Toxicity	. Adverse ecological impact is not known of expected under normal use.			
Bioaccumulation Potential	: No data available.			
Additional advice	: Not applicable			
	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. DOT Classification	: Not regulated for transportation.			
ICAO/IATA	: Not regulated for transportation.			
IMO / IMDG	: Not regulated for transportation.			
	15. REGULATORY INFORMATION			

PolyOne.

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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 (Previous Substances (40 CFR 302)) US EPA CERCLA Hazardous Substances (40 CFR 302) Not applicable Catifornia Proposition WARNINC! This product contains a chemical known to the State of Catifornia to cause cancer. SARA Title III Section 302 Extremely Hazardous Substance Not applicable SARA Title III Section 312 Toxic Chemicals: Not applicable SARA Title III Section 313 Toxic Chemicals: Not applicable SARA Title III Section 313 Toxic Chemicals: Not applicable SARA Title III Section 313 Toxic Chemicals: Not applicable SARA Title III Section 313 Toxic Chemicals: Not applicable SARA Title III Section 313 Toxic Chemicals: Not applicable SARA Title III Section 313 Toxic Chemicals: Not applicable National Pollutant Release Inventory (NPRI) Not applicable National Pollutant Betase Inventory (NPRI) Not applicable WHMIS Ingredient Disclosure List Not applicable Matrix Antimony chromium buff 68186-90-3 9.25 MIS Ingredient Disclosure List Not applicable Stata Actidition :	rsion Number 1.0 vision Date 08/08/2003			Prin	Page 7 of t Date <u>11/11/201</u>
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Substances List (DSL) or are exempt.	WHMIS Ingredient Disclosu CAS-No. 1333-86-4	2			
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	Australia AICS :	Not determined.			



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China IECS	: Listed.
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 when used in combination with any other materials and/or in any particular process or processing conditions.