MATERIAL SAFETY DATA SHEET **ORANGE**

Version Number 1.0 Revision Date 02/24/2005

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone:Emergency telephone:number	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	ORANGE
Product code	CC10065857
Chemical Name	Mixture
CAS-No.	Mixture
Product Use	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
C.I. Pigment Red 108	58339-34-7	1 - 5
Titanium dioxide	13463-67-7	5 - 10
Molybdate orange (Lead chromate pigment)	12656-85-8	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, 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.



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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 or 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 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 applicable Carbon dioxide blanket, water spray, dry powder, foamnone.
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. 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.
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.



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Storage

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: 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.
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)

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Components	Value	Exposure time	Exposure type	List:
C.I. Pigment Red 108	0.005	Time Weighted Average	as Cd	OSHA
	mg/m3	(TWA):		
	0.0025	OSHA Action level:	as Cd	OSHA
	mg/m3			
	0.2 mg/m3	PEL:	as Se	OSHA Z1
	0.01	Time Weighted Average	as Cd	ACGIH
	mg/m3	(TWA):		
	0.2 mg/m3	Time Weighted Average	as Se	ACGIH
		(TWA):		
	0.002	Time Weighted Average	Respirable fraction. as	ACGIH
	mg/m3	(TWA):	Cd	
Molybdate orange	0.05	Time Weighted Average		OSHA
(Lead chromate	mg/m3	(TWA):		
pigment)				
	0.03	OSHA Action level:		OSHA
	mg/m3			
	0.1 mg/m3	Ceiling Limit Value:		OSHA Z2
	0.01	Time Weighted Average	as Cr	ACGIH
	mg/m3	(TWA):		
	0.05	Time Weighted Average	as Pb	ACGIH
	mg/m3	(TWA):		
	1 mg/m3	PEL:	as Cr	OSHA Z1
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
	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
 ORANGE
 Very faint
 Not determined
 Not applicable
 Insoluble

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pH

Not applicableNot determinedNot establishedNot applicableNot 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. : Hazardous decomposition Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen : products (NOx), other hazardous materials, and smoke are all possible.
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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
58339-34-7	C.I. Pigment Red 108	Irritant	Eyes, Skin.
		Systemic effects	Liver, central nervous system (CNS), Kidney.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
12656-85-8	Molybdate orange (Lead chromate pigment)	Irritant	Eyes, Skin.
		Systemic effects	central nervous system (CNS), reproductive system.

Carcinogenicity

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This product contains the following components which, in their pure form, have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
58339-34-7	C.I. Pigment Red 108	yes	1	1

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:

C.I. Pigment Red 108 58339-34-7 Can produce rapid and sometimes fatal pulmonary edema, chronic absorption leads to liver and kidney damage.

Additional Health Hazard Information:

Molybdate orange (Lead chromate pigment) 12656-85-8 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

12. ECOLOGICAL INFORMATION		
Persistence and degradability	: Not readily biodegradable.	
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.	



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polymer matrix.			
Additional advice	:	No data available	
	1.	3. DISPOSAL CONSIDERATIONS	
Product	:	Like most thermoplastic plastics 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 materi 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. DOT Classification	:	Not regulated for transportation.	
ICAO/IATA (air)	:	Refer to specific regulation.	
IMO / IMDG (maritime)	:	Refer to specific regulation.	
	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 TSC. Inventory.	
US. EPA CERCLA Hazardous	s Sub	stances (40 CFR 302)	
Not applicable			
California Proposition 65	:	WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	
SARA Title III Section 302 Ex	trem	ely Hazardous Substance	

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Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
CADMIUM COMPOUNDSSELENIUM	58339-34-7	4.23
COMPOUNDS		
CHROMIUM VI COMPOUNDSLEAD	12656-85-8	29.76
COMPOUNDS, INORGANICLEAD		
COMPOUNDS		

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
C.I. Pigment Red 108	58339-34-7	4.23	233
C.I. Pigment Red 108	58339-34-7	4.23	200
Molybdate orange (Lead chromate pigment)	12656-85-8	29.76	235
Molybdate orange (Lead chromate pigment)	12656-85-8	29.76	236

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
58339-34-7	
12656-85-8	

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	:	Listed
Korea KECI	:	Listed

Philippines PICCS : Listed

16. OTHER INFORMATION



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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.