



POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

ORANGE PATCH

Version Number 1.1
Revision Date 10/18/2004

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION
8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone : Product Stewardship (770) 590-3500 x.3563
Emergency telephone number : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**

Product name : ORANGE PATCH
Product code : FO20005608
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Molybdate orange (Lead chromate pigment)	12656-85-8	1 - 5
Methyl ethyl ketone	78-93-3	60 - 100

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable. May be harmful if inhaled. Harmful if swallowed. May cause skin irritation. Flammable liquid and vapor. Vapors may be irritating to eyes and respiratory tract. 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. In addition, heating or processing this material may result in product degradation or byproduct formation creating additional hazards. See Sections 8 and 11 for additional details.

POTENTIAL HEALTH EFFECTS

Routes of Exposure: : Inhalation, Skin contact, Ingestion

Acute exposure

Inhalation : Excessive inhalation of product vapors may cause respiratory irritation, headaches, dizziness, and/or nausea.
Ingestion : May be harmful if swallowed. May cause nausea, abdominal spasms and irritation of the mucous membranes.
Eyes : Liquid, aerosol, or vapors of this product are irritating and may cause tearing, reddening, and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.
Skin : Prolonged or repeated skin contact can cause de-fatting and drying of the skin which may result in skin irritation and dermatitis (rash).

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- 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 vapours or decomposition products. Seek medical attention after significant exposure.
- Ingestion** : Do not induce vomiting without medical advice. If conscious, drink plenty of water. Seek medical attention if necessary.
- Eyes** : Rinse immediately with plenty of water 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** : Less than 75 °F (24 °C)
- Flammable Limits**
- Upper explosion limit : No data available
 - Lower explosion limit : No data available
- Autoignition temperature** : No data available
- Suitable extinguishing media** : Carbon dioxide blanket, water, foam, dry chemical none.
- 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 (NO_x), 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** : The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.
- Methods for cleaning up** : Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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7. HANDLING AND STORAGE

- Handling : Flammable liquid. Keep away from flames, hot surfaces, and sources of ignition. Use of non-sparking or explosion-proof equipment may be necessary. Never use compressed air for transferring product. Ensure all equipment is electrically grounded before beginning transfer operations. Take measures to prevent the build up of static electricity. Use only in area provided with appropriate exhaust ventilation.
- Storage : Store below 120 °F (49 °C) Keep containers tightly closed in a cool, well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammable Liquid. Check local fire regulations for sprinkler or explosion proof storage location requirements.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Respiratory protection : Airborne contaminant levels should be maintained below the occupational exposure guidelines. When respiratory protection is required, use an approved air-purifying or positive pressure supplied-air respirator, depending upon potential airborne contaminant concentrations. Employees using respirators must be properly trained.
- Eye/Face Protection : Wear goggles or face shield during operations that present a splash potential.
- Hand protection : Protective gloves. Protective gloves. Refer to equipment supplier to ensure protection.
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- 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. Ensure adequate ventilation, especially in confined areas.
- Engineering measures : Provide general and/or local exhaust ventilation to control airborne contaminant levels below the exposure guidelines.

Exposure limit(s)

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Components	Value	Exposure time	Exposure type	List:
Molybdate orange (Lead chromate pigment)	0.05 mg/m3	Time Weighted Average (TWA):		OSHA
	0.03 mg/m3	OSHA Action level:		OSHA
	0.1 mg/m3	Ceiling Limit Value:		OSHA Z2
	0.01 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):	as Pb	ACGIH
	1 mg/m3	PEL:	as Cr	OSHA Z1
Methyl ethyl ketone	200 ppm	Time Weighted Average (TWA):		ACGIH
	300 ppm	Short Term Exposure Limit (STEL):		ACGIH
	200 ppm 590 mg/m3	PEL:		OSHA Z1

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid	Evaporation rate	: Faster than Butyl Acetate
Appearance	: liquid	Specific Gravity:	: Not determined
Color	: ORANGE	Bulk density	: Not applicable
Odor	: solvent	Vapor pressure	: Not determined
Melting point/range	: Not applicable	Vapour density	: Heavier than air.
Boiling Point:	: No data available	pH	: Not determined
Water solubility	: Negligible		

10. STABILITY AND REACTIVITY

Stability	: Stable.
Hazardous Polymerization	: Will not occur.
Conditions to avoid	: Keep away from oxidizing agents and open flame. Heat, flames and sparks.
Incompatible Materials	: Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	: Carbon dioxide (CO ₂), carbon monoxide (CO), 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

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This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
12656-85-8	Molybdate orange (Lead chromate pigment)	Irritant	Eyes, Skin.
		Systemic effects	central nervous system (CNS), reproductive system.
78-93-3	Methyl ethyl ketone	Irritant	Eyes, Skin, Respiratory system.
		Systemic effects	central nervous system (CNS).

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
78-93-3	Methyl ethyl ketone	LC50	32 gm/m3	mouse
		Oral LD50	4,050 mg/kg	mouse
		Dermal LD50	6,480 mg/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

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:

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 : No data available
 Environmental Toxicity : No data available
 Bioaccumulation Potential : No data available
 Additional advice : No data available

13. DISPOSAL CONSIDERATIONS

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Product : Dispose of properly. Do not dump into sewers, on the ground, or into any body of water. 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
Proper Shipping Name: RESIN SOLUTION
Technical Name:
Hazard Class / Division 3
UN Number UN1866
Packing Group II
Label Required 3
Hazardous Substance Not applicable
Reportable quantity: 8,111 LB

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 TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	% in Product	RQ for component	RQ for Mixture/Product
Methyl ethyl ketone	78-93-3	61.6422	5,000 lbs	8,111 LB

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

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other reproductive harm.

SARA Title III Section 302 Extremely Hazardous Substance

Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
CHROMIUM VI COMPOUNDS LEAD COMPOUNDS, INORGANIC LEAD COMPOUNDS	12656-85-8	1.14
METHYL ETHYL KETONE	78-93-3	61.64

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Molybdate orange (Lead chromate pigment)	12656-85-8	1.14	235
Molybdate orange (Lead chromate pigment)	12656-85-8	1.14	236
Isopopropanol	67-63-0	0.34	142
Methyl ethyl ketone	78-93-3	61.64	158

WHMIS Classification : D2A, B2

WHMIS Ingredient Disclosure List

CAS-No.
12656-85-8
78-93-3

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 : Not determined
Japan ENCS : Not determined
Korea KECI : Listed
Philippines PICCS : Listed



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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.