



POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

ORANGE 511874 (LASERMARK)

Version Number 1.0
Revision Date 08/19/2003

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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 : ORANGE 511874 (LASERMARK)
Product code : CC10040987
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester	52829-07-9	5 - 10
Mica	12001-26-2	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Iron Copper chromite black spinel (C.I. Pigment Black 23)	68187-54-2	5 - 10

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 : 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 : Experience shows no unusual dermatitis hazard from routine handling.

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Print Date 11/12/2011**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 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.



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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.
- 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.
- 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:
Iron Copper chromite black spinel (C.I. Pigment Black 23)	0.5 mg/m3	PEL:	as Sb	OSHA Z1
Iron Copper chromite black spinel (C.I. Pigment Black 23)	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
Mica	20 mppcf	PEL:	Total dust.	OSHA
	3 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	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 : Solid
- Appearance : Pellets
- Color : ORANGE
- Evaporation rate : Not applicable.
- Specific Gravity : Not determined
- Bulk density : Not established

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Odor	: Very faint	Vapor pressure	: Not applicable
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 : 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 products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), 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
52829-07-9	Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidiny) ester	Irritant	Eyes.
12001-26-2	Mica	Systemic effects	Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
68187-54-2	Iron Copper chromite black spinel (C.I. Pigment Black 23)	Irritant	Eyes, 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
52829-07-9	Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidiny) ester	Oral LD50 Dermal LD50	3,700 mg/kg > 3,100 mg/kg	rat rabbit

12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Chemicals are not readily available as they are bound within the matrix

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of the polymer.

Bioaccumulation Potential : Chemicals are not readily available as they are bound within the matrix of the polymer.

Additional advice : No data available.

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 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 : Refer to specific regulation.

ICAO/IATA : Refer to specific regulation.

IMO / IMDG : 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)

Not applicable

California Proposition : This product does not contain a substance listed by California Prop 65.
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SARA Title III Section 302 Extremely Hazardous Substance

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Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
ANTIMONY COMPOUNDS	68187-54-2	5.16

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Iron Copper chromite black spinel (C.I. Pigment Black 23)	68187-54-2	5.16	17

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.
68187-54-2
12001-26-2

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.

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.



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