

MATERIAL SAFETY DATA SHEET

DARK LASERMARK ADDITIVE

 Version Number 1.0
 Page 1 of 6

 Revision Date 06/10/2005
 Print Date 11/18/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (770) 271-5902

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

number or accident).

Product name : DARK LASERMARK ADDITIVE

Product code : CC10062998 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|-------------------------------|------------|----------|
| Tin antimony gray cassiterite | 68187-54-2 | 1 - 5 |
| Mica | 12001-26-2 | 1 - 5 |
| Titanium dioxide | 13463-67-7 | 1 - 5 |

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.

Chronic exposure : Refer to Section 11 for Toxicological Information.



MATERIAL SAFETY DATA SHEET

DARK LASERMARK ADDITIVE

 Version Number 1.0
 Page 2 of 6

 Revision Date 06/10/2005
 Print Date 11/18/2011

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 applicable

Suitable extinguishing media : Carbon dioxide blanket, water spray, dry powder, foamnone.

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.

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.

7. HANDLING AND STORAGE

Handling : Take measures to prevent the build up of electrostatic charge. Heat

only in areas with appropriate exhaust ventilation.



MATERIAL SAFETY DATA SHEET

DARK LASERMARK ADDITIVE

Version Number 1.0 Page 3 of 6
Revision Date 06/10/2005 Print Date 11/18/2011

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: |
|-------------------------------|------------|------------------------------|----------------------|---------|
| Tin antimony gray cassiterite | 0.5 mg/m3 | PEL: | as Sb | OSHA Z1 |
| Cassiterite | | | | |
| | 0.5 mg/m3 | Time Weighted Average | as Sb | ACGIH |
| | | (TWA): | | |
| 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 | | ACGIH |
| | | (TWA): | | |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |

9. PHYSICAL AND CHEMICAL PROPERTIES

Not applicable Form : Solid Evaporation rate : Pellets Specific Gravity: Not determined Appearance Color Bulk density Not established : NO PIGMENT Odor Very faint Vapor pressure Not applicable Melting point/range Not determined Vapour density Not applicable Boiling Point: Not applicable Not applicable pН

Water solubility : Insoluble

10. STABILITY AND REACTIVITY



MATERIAL SAFETY DATA SHEET

DARK LASERMARK ADDITIVE

Version Number 1.0 Page 4 of 6 Revision Date 06/10/2005 Print Date 11/18/2011

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

(NOx), 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 |
|------------|-------------------|------------------|---------------------|
| 68187-54-2 | Tin antimony gray | Irritant | Eyes, Skin. |
| | cassiterite | | |
| 12001-26-2 | Mica | Systemic effects | Respiratory system. |
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. |

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 No data available

13. 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.

Recycling is preferred when possible. The generator of waste material Contaminated packaging

> has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial

and local regulations.



MATERIAL SAFETY DATA SHEET

DARK LASERMARK ADDITIVE

 Version Number 1.0
 Page 5 of 6

 Revision Date 06/10/2005
 Print Date 11/18/2011

14. 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 TSCA

Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Not applicable

California Proposition : Not applicable

65

SARA Title III Section 302 Extremely Hazardous Substance Not applicable

SARA Title III Section 313 Toxic Chemicals:

| Chemical Name | CAS-No. | Weight % |
|--------------------|------------|-------------|
| ANTIMONY COMPOUNDS | 68187-54-2 | 1.00 - 5.00 |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight % | NPRI ID# |
|-------------------------------|------------|-------------|----------|
| Tin antimony gray cassiterite | 68187-54-2 | 1.00 - 5.00 | 17 |

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List



MATERIAL SAFETY DATA SHEET

DARK LASERMARK ADDITIVE

 Version Number 1.0
 Page 6 of 6

 Revision Date 06/10/2005
 Print Date 11/18/2011

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