

MATERIAL SAFETY DATA SHEET

ES-105 SEARS RED (MG-38)

Version Number 1.0 Page 1 of 7
Revision Date 08/21/2002 Print Date 11/5/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY : Product Stewardship (770) 271-5902

TELEPHONE

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

number or accident).

Product name : ES-105 SEARS RED (MG-38)

Product code : CC10021502 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

| Components | CAS-No. | Weight % |
|----------------------|------------|----------|
| Cadmium | 7440-43-9 | 1 - 5 |
| Selenium | 7782-49-2 | 1 - 5 |
| C.I. Pigment Red 108 | 58339-34-7 | 30 - 60 |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. 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

ES-105 SEARS RED (MG-38)

 Version Number 1.0
 Page 2 of 7

 Revision Date 08/21/2002
 Print Date 11/5/2011

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 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.

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

ES-105 SEARS RED (MG-38)

 Version Number 1.0
 Page 3 of 7

 Revision Date 08/21/2002
 Print Date 11/5/2011

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 : Handle in accordance with good industrial hygiene and safety practice.

Considerations 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: |
|----------------------|-----------|-----------------------------|-------------------------|---------|
| 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 |
| C.I. Pigment Red 108 | 0.2 mg/m3 | Time Weighted Average | as Se | MX OEL |
| | | (TWA): | | |
| | 0.01 | Time Weighted Average | | ACGIH |
| | mg/m3 | (TWA): | | |
| C.I. Pigment Red 108 | 0.2 mg/m3 | Time Weighted Average | | ACGIH |
| | | (TWA): | | |
| Cadmium | 0.01 | Time Weighted Average | Inhalable fraction. as | ACGIH |
| | mg/m3 | (TWA): | Cd | |
| | 0.002 | Time Weighted Average | Respirable fraction. as | ACGIH |
| | mg/m3 | (TWA): | Cd | |
| Cadmium | 0.005 | Time Weighted Average | Total as Cd | OSHA |
| | mg/m3 | (TWA): | | |
| Selenium | 0.2 mg/m3 | Time Weighted Average | | ACGIH |
| | | (TWA): | | |
| Selenium | 0.2 mg/m3 | PEL: | as Se | OSHA Z1 |

9. PHYSICAL AND CHEMICAL PROPERTIES



MATERIAL SAFETY DATA SHEET

ES-105 SEARS RED (MG-38)

 Version Number 1.0
 Page 4 of 7

 Revision Date 08/21/2002
 Print Date 11/5/2011

Form : Solid Evaporation rate : Not applicable. : Pellets Specific Gravity : Not determined Appearance Bulk density : Not established Color : RED : Not applicable Odor : Very faint Vapor pressure Melting point/range : Not determined Vapor density : Not applicable Boiling Point: : Not applicable : Not applicable pН

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

(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 |
|------------|----------------------|------------------|---|
| 7440-43-9 | Cadmium | Systemic effects | Respiratory system, blood and blood forming system, Kidney, urinary system, reproductive system. |
| | | Highly Toxic | Refer to LC50 / LD50 Data on MSDS |
| 7782-49-2 | Selenium | Systemic effects | Liver, central nervous system, digestive system. |
| 58339-34-7 | C.I. Pigment Red 108 | 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 |
|-----------|---------------|-----------|-------------|---------|
| 7440-43-9 | Cadmium | LC50 | 25 mg/m3 | rat |
| | | Oral LD50 | 2,330 mg/kg | rat |
| 7782-49-2 | Selenium | Oral LD50 | 6,700 mg/kg | rat |

Carcinogenicity:



MATERIAL SAFETY DATA SHEET

ES-105 SEARS RED (MG-38)

 Version Number 1.0
 Page 5 of 7

 Revision Date 08/21/2002
 Print Date 11/5/2011

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

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|----------------------|------|------|-----|
| 7440-43-9 | Cadmium | yes | 1 | 1 |
| 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:

Cadmium 7440-43-9 Can produce rapid and sometimes fatal pulmonary edema, chronic absorption leads to liver and kidney damage.

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.

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



MATERIAL SAFETY DATA SHEET

ES-105 SEARS RED (MG-38)

 Version Number 1.0
 Page 6 of 7

 Revision Date 08/21/2002
 Print Date 11/5/2011

U.S. DOT / CA TDG

Classification

: Not regulated for transportation.

ICAO/IATA : Not regulated for transportation.

IMO / IMDG : Not regulated for transportation.

15. REGULATORY INFORMATION

US Regulations:

OSHA Status : Classified as hazardous based on components.

TSCA Status : All components of this product are listed on the TSCA inventory or are

exempt.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

| Chemical Name | CAS-No. | % in Product | RQ for component | RQ for |
|---------------|-----------|--------------|------------------|-----------------|
| | | | | Mixture/Product |
| Cadmium | 7440-43-9 | 4.6296 | 010 lbs | 216 LB |

California Proposition

65

: WARNING! This product contains a chemical known in the State of California to cause cancer., WARNING! This product contains a

chemical known in the State of California to cause birth defects or

other reproductive harm.

SARA Title III Section 313 Toxic Chemicals:

| Chemical Name | CAS-No. | Weight % |
|--------------------|------------|----------|
| CADMIUM COMPOUNDS | 58339-34-7 | 33.06 |
| SELENIUM COMPOUNDS | | |
| CADMIUM | 7440-43-9 | 04.62 |
| SELENIUM | 7782-49-2 | 00.92 |

Canadian Regulations:

WHMIS Classification : D1A

WHMIS Ingredient Disclosure List

CAS-No. 58339-34-7



MATERIAL SAFETY DATA SHEET

ES-105 SEARS RED (MG-38)

 Version Number 1.0
 Page 7 of 7

 Revision Date 08/21/2002
 Print Date 11/5/2011

7440-43-9 7782-49-2

DSL : Listed.

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 used in combination with any other materials or in any process, unless specified in the text.