

MATERIAL SAFETY DATA SHEET

GOLD

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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 | : | GOLD |
| Product code | : | CC10001436 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|------------------|------------|----------|
| Carbon black | 1333-86-4 | 0.1 - 1 |
| Iron oxide | 1309-37-1 | 1 - 5 |
| Titanium dioxide | 13463-67-7 | 1 - 5 |
| Mica | 12001-26-2 | 10 - 30 |

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 fumes may be released upon heating or crosslinking and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect his employee from exposure. See Sections 3 and 11 for special precautions.

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 eves. | | |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. | | |
| Chronic exposure | : Refer to Section 11 for Toxicological Information. | | |

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GOLD Version Number 1.1 Page 3 of 7 Revision Date 09/18/2001 Print Date 11/1/2011 only in areas with appropriate exhaust ventilation. : Keep containers dry and tightly closed to avoid moisture absorption Storage and contamination. Keep in a dry, cool place. 8. EXPOSURE CONTROLS / PERSONAL PROTECTION : No personal respiratory protective equipment normally required. Respiratory protection Eye/Face Protection Safety glasses with side-shields. : Hand protection : Protective gloves. Skin and body protection : Long sleeved clothing. Additional Protective : Safety shoes. Measures General Hygiene : Handle in accordance with good industrial hygiene and safety practice. Considerations Wash hands before breaks and at the end of workday. : Heat only in areas with appropriate exhaust ventilation. Provide Engineering measures appropriate exhaust ventilation at machinery. Exposure limit(s)

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| Components | Value | Exposure time | Exposure type | List: |
|------------------|-----------|-----------------------------------|----------------|---------|
| Carbon black | 3.5 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 3.5 mg/m3 | PEL: | | OSHA Z1 |
| | 3.5 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| | 7 mg/m3 | Short Term Exposure Limit (STEL): | | MX OEL |
| Iron oxide | 5 mg/m3 | Time Weighted Average (TWA): | as Fe | ACGIH |
| | 10 mg/m3 | PEL: | Fume. | OSHA Z1 |
| | 5 mg/m3 | Time Weighted Average (TWA): | as Fe | MX OEL |
| | 10 mg/m3 | Short Term Exposure Limit (STEL): | as Fe | MX OEL |
| Mica | 3 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 20 ppm | PEL: | Dust. as mppcf | OSHA |
| Titanium dioxide | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 10 mg/m3 | Time Weighted Average (TWA): | as Ti | MX OEL |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Form |
|---------------------|
| Appearance |
| Color |
| Odor |
| Melting point/range |
| Boiling Point: |
| Water solubility |

: Solid

: Pellets

: BROWN

: Very faint

: Insoluble

: Not determined.

: Not applicable

Evaporation rate Specific Gravity Bulk density Vapor pressure Vapor density pН

: Not applicable. Not determined. : : Not established : Not applicable : Not 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 products | : | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. |

11. TOXICOLOGICAL INFORMATION



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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 |
|------------|------------------|------------------|---------------------------------|
| 1333-86-4 | Carbon black | Systemic effects | Eyes, Respiratory system, heart |
| | | | or circulatory system. |
| 1309-37-1 | Iron oxide | Systemic effects | Respiratory system. |
| 13463-67-7 | Titanium dioxide | Systemic effects | Respiratory system. |
| 12001-26-2 | Mica | Systemic effects | Respiratory system. |

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 |
|-----------|---------------|-------------|---------------|---------|
| 1333-86-4 | Carbon black | Oral LD50 | >15,400 mg/kg | rat |
| | | Dermal LD50 | > 3 gm/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 |
|-----------|---------------|------|------|-----|
| 1333-86-4 | Carbon black | no | 2B | no |

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:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

12. ECOLOGICAL INFORMATION

Persistence and degradability

: Not readily biodegradable.



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| | |
| 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 possibl 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 materia 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. D.O.T. / CA T.D.G. Classification (Non-bulk ground) | : 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 |
| TSCA Status | : All components of this product are listed on the TSCA inventory or are exempt. |
| California Proposition 65 | : This product does not contain a substance listed by California Prop 65 |
| Canadian Regulations: | |
| WHMIS Classification | : D2B |
| WHMIS Ingredient Disc | losure List |
| | |

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| CAS-No. 1333-86-4 1309-37-1 12001-26-2 150-13-0 18282-10-5 | | |
| DSL : | Listed. | |
| National Inventories: | | |
| Australia AICS : | Listed. | |
| China IECS : | Listed. | |
| Europe EINECS : | Not Listed. | |
| Japan ENCS : | Not Listed. | |
| 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.

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