PolvOne

MATERIAL SAFETY DATA SHEET COOKSON COPPER

Version Number 1.0 Revision Date 03/04/2008

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone:Emergency telephone: | Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). | |
|--------------------------------|---|--|
| Product name : | COOKSON COPPER | |
| Product code : | CC10109278 | |
| Chemical Name : | Mixture | |
| CAS-No. | Mixture | |
| Product Use : | Industrial Applications | |

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components | CAS-No. | Weight % |
|--------------------------------|------------|----------|
| Toluene | 108-88-3 | 0.1 - 1 |
| Rutile, antimony chromium buff | 68186-90-3 | 1 - 5 |
| Iron oxide | 1309-37-1 | 5 - 10 |
| Mica | 12001-26-2 | 10 - 30 |

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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| Medical Conditions : None known. | | | | |
|--|---|--|--|--|
| Aggravated by Exposure: | | | | |
| | 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 Lower explosion limit | Not applicableNot applicable | | | |
| Autoignition temperature Suitable extinguishing media | Not applicableCarbon dioxide blanket, Water spray, Dry powder, Foam. | | | |
| Suitable extinguishing media | . Carbon dioxide branket, water spray, Dry powder, Poani. | | | |
| 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 | | | |

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|--|------|--|
| | | |
| 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. EX | POSU | RE 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) | | |

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| Components | Value | Exposure time | Exposure type | List: |
|--------------------------------|---------------------|-----------------------------------|----------------------|---------|
| Iron oxide | 5 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | 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): | Respirable fraction. | ACGIH |
| | 3 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| Rutile, antimony chromium buff | 0.5 mg/m3 | Time Weighted Average (TWA): | as Cr | ACGIH |
| | 0.5 mg/m3 | PEL: | as Cr | OSHA Z1 |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | | MX OEL |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Sb | ACGIH |
| | 0.5 mg/m3 | PEL: | as Sb | OSHA Z1 |
| | 0.5 mg/m3 | Time Weighted Average (TWA): | as Sb | MX OEL |
| Toluene | 20 ppm | Time Weighted Average (TWA): | | ACGIH |
| | 200 ppm | Time Weighted Average (TWA): | | OSHA Z2 |
| | 300 ppm | Ceiling Limit Value: | | OSHA Z2 |
| | 500 ppm | Maximum concentration: | | OSHA Z2 |
| | 50 ppm 188 mg/m3 | Time Weighted Average (TWA): | | MX OEL |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odour Melting point/range Boiling Point: Water solubility Solid
pellets
BROWN
Very faint
Not determined
Not applicable
Insoluble

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH Not applicableNot determined

- Not establishedNot applicable
- Not applicableNot applicable
 - Not applicable

:

10. STABILITY AND REACTIVITY

Stability

: Stable.

:

Will not occur.

Hazardous Polymerization

Conditions to avoid

: Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.

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| 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 |
|------------|------------------|------------------|--------------------------------|
| 108-88-3 | Toluene | Systemic effects | central nervous system (CNS), |
| | | | Liver, Kidney, urinary system. |
| | | Irritant | Skin, Eyes. |
| 68186-90-3 | Rutile, antimony | Irritant | Eyes, Skin, Respiratory |
| | chromium buff | | system. |
| 1309-37-1 | Iron oxide | 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 |
|----------|---------------|-------------|----------------|---------|
| 108-88-3 | Toluene | LC50 | 49 gm/m3 | rat |
| | | LC50 | | mouse |
| | | LC50 | | rat |
| | | Oral | 636 mg/kg2,600 | ratrat |
| | | LD50Oral | - 7,500 mg/kg | rabbit |
| | | LD50 | 14100 ul/kg | rabbit |
| | | Dermal LD50 | 12,124 mg/kg | |
| | | Dermal LD50 | | |

Additional Health Hazard Information:

Rutile, antimony chromium buff 68186-90-3 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

| | 12 | 2. 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. | |
| | | | |

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| astics the product can be recycled. Where red to disposal or incineration. The l has the responsibility for proper waste on and disposal in accordance with ovincial and local regulations. en possible. The generator of waste lity for proper waste classification, l in accordance with applicable federal, egulations. MATION ation. |
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SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

| Chemical Name | CAS-No. | Weight % |
|--------------------------------|------------|-------------|
| CHROMIUM III COMPOUNDSANTIMONY | 68186-90-3 | 1.00 - 5.00 |
| COMPOUNDS | | |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name | CAS-No. | Weight % | NPRI ID# |
|---|------------|-------------|----------|
| Rutile, antimony chromium buff | 68186-90-3 | 1.00 - 5.00 | 69 |
| | | 1.00 - 5.00 | 17 |
| 2-Propenoic acid, 2-methyl-, methyl ester | 80-62-6 | 0.10 - 1.00 | |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No. | |
|------------|--|
| 1309-37-1 | |
| 12001-26-2 | |
| 68186-90-3 | |

DSL

DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

| Australia AICS | : Not determined |
|-------------------|------------------|
| China IECS | : Not determined |
| Europe EINECS | : Not determined |
| Japan ENCS | : Not determined |
| Korea KECI | : Not determined |
| Philippines PICCS | : Not determined |

:

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

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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.