PolyOne

MATERIAL SAFETY DATA SHEET TRAFFIC RED R3020N

Version Number 1.1 Revision Date 03/23/2014

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| 1. | PROD | UCT AND COMPANY IDENTIFICATION |
|--|------|--|
| POLYONE CORPORATI 33587 Walker Road, Avon | | ОН 44012 |
| Telephone Emergency telephone number | : | 1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). |
| Product name | : | TRAFFIC RED R3020N |
| Product code | : | CC10140148 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight percent |
|--|------------|----------------|
| 1,6-Hexanediamine, N,N'-bis(2,2,6,6- tetramethyl-4-piperidinyl)-,polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products | 70624-18-9 | 1 - 5 |
| Barium sulfate | 7727-43-7 | 1 - 5 |
| C.I. Pigment Red 108 | 58339-34-7 | 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 Eyes | May be harmful if swallowed.Resin particles, like other inert materials, are mechanically irritating to |

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| Skin | eyes. : Experience shows no unusual dermatitis hazard from routine handlin |
|---|--|
| 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 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 a 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. FIREFIGHTING MEASURES |
| Flash point | : not applicable |
| Flammable Limits | |
| Upper explosion limit | : not applicable |
| Lower explosion limit | : not applicable |
| Auto-ignition temperature Suitable extinguishing media | not applicableCarbon 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 | : 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 |

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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. |

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| Components | Value | Exposure time | Exposure type | List: |
|----------------------|-----------------|-----------------------------------|-------------------------------|----------|
| Barium sulfate | 10 mg/m3 | Time Weighted Average (TWA): | | ACGIH |
| | 5 mg/m3 | Recommended exposure limit (REL): | Respirable. | NIOSH |
| | 10 mg/m3 | Recommended exposure limit (REL): | Total | NIOSH |
| | 5 mg/m3 | PEL: | Respirable fraction. | OSHA Z1 |
| | 15 mg/m3 | PEL: | Total dust. | OSHA Z1 |
| | 5 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | OSHA Z1A |
| | 10 mg/m3 | Time Weighted Average (TWA): | Total dust. | OSHA Z1A |
| C.I. Pigment Red 108 | 0.01 mg/m3 | Time Weighted Average (TWA): | as Cd | ACGIH |
| | 0.002 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. as Cd | ACGIH |
| | 0.005 mg/m3 | Time Weighted Average (TWA): | | OSHA |
| | 0.0025 mg/m3 | OSHA Action level: | | OSHA |
| | 0.002 mg/m3 | Time Weighted Average (TWA): | Respirable dust. as Cd | MX OEL |
| | 0.01 mg/m3 | Time Weighted Average (TWA): | Total dust. as Cd | MX OEL |
| | 0.2 mg/m3 | Time Weighted Average (TWA): | as Se | ACGIH |
| | 0.2 mg/m3 | PEL: | as Se | OSHA Z1 |
| | 0.2 mg/m3 | Time Weighted Average (TWA): | as Se | OSHA Z1A |
| | 0.2 mg/m3 | Time Weighted Average (TWA): | as Se | MX OEL |
| | 0.2 mg/m3 | Recommended exposure limit (REL): | as Se | NIOSH |

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility solid
pellets
RED
very faint
Not determined
not applicable
insoluble

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH

- Not applicableNot determinedNot establishednot applicable
- : not applicable
- : not applicable

10. STABILITY AND REACTIVITY

Stability

: The product is stable if stored and handled as prescribed.

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| 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 |
|------------|---|------------------|--|
| 70624-18-9 | 1,6-Hexanediamine, N,N'- bis(2,2,6,6-tetramethyl-4- piperidinyl)-,polymer with 2,4,6-trichloro-1,3,5- triazine, reaction products | Irritant | Eyes, Skin, Respiratory system. |
| 7727-43-7 | Barium sulfate | Irritant | Respiratory system. |
| | | Systemic effects | Eyes, Respiratory system. |
| 58339-34-7 | C.I. Pigment Red 108 | Irritant | Eyes, Skin. |
| | | Systemic effects | Liver, central nervous system (CNS), Kidney. |

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 |
|------------|-----------------------------|-------------|---------------|---------|
| 70624-18-9 | 1,6-Hexanediamine, N,N'- | Oral LD50 | > 2,000 mg/kg | rat |
| | bis(2,2,6,6-tetramethyl-4- | Dermal LD50 | > 3,000 mg/kg | rat |
| | piperidinyl)-,polymer with | | | |
| | 2,4,6-trichloro-1,3,5- | | | |
| | triazine, reaction products | | | |

Carcinogenicity

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

| CAS-No. | Chemical Name | OSHA | IARC | NTP |
|------------|----------------------|------|------|-----|
| 58339-34-7 | C.I. Pigment Red 108 | yes | 1 | no |

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

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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:

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 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. |
| 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 | : Not regulated for transportation. |
| ICAO/IATA | : Refer to specific regulation. |
| IMO/IMDG (maritime) | : Refer to specific regulation. |
| | 15. REGULATORY INFORMATION |
| US Regulations: | |
| OSHA Status | : Classified as hazardous based on components. |
| OSIII Suuus | |

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| JS. EPA CERCLA Hazardous Substances (40 CFR 302) not applicable California Proposition : WARNING! This p 65 California to cause c chemical known to t other reproductive h ARA Title III Section 302 Extremely Hazardous Substant Juless specific chemicals are identified under this section ARA Title III Section 313 Toxic Chemicals: Juless specific chemicals are identified under this section CADMIUM COMPOUNDSSELENIUM COMPOUNI ZINC COMPOUNDS Canadian Regulations: | product cont cancer., WA the State of harm. tance on, this produ <u>on, this produ</u> | ARNING! The California to Luct is Not Ap Luct is Not Ap S-No. 9-34-7 | nis product cause birt plicable u | t contains a th defects or nder this reg <u>ercent</u> 30.00 |
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| | | | | |
| National Dallatant Dalagas Investant (NDDI) | | | | |
| National Pollutant Release Inventory (NPRI) | | XXX * 1 | | |
| Chemical Name CA | CAS-No. | Weight | | NPRI ID# |
| CL D: (D. 1100) 50 | 0000 04 7 | percent | | |
| C.I. Pigment Red 108 58 | 58339-34-7 | 10.00 - | | |
| | | 10.00 - | | |
| Zinc sulfide 13 | 1314-98-3 | 10.00 - | 30.00 | |
| WHMIS Classification : D2A WHMIS Ingredient Disclosure List | | | | |
| | | | | |
| CAS-No. 58339-34-7 | | | | |
| | | | | |

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| Austr | alia AICS | : | Listed |
|------------|-------------|---|----------------|
| China | IECS | : | Listed |
| Europ | e EINECS | : | Listed |
| Japan | ENCS | : | Not determined |
| Korea KECI | | : | Not determined |
| Philip | pines 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 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.