MATERIAL SAFETY DATA SHEET X15502012402 NATURAL

Version Number 1.2 Revision Date 03/18/2014

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 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 | : | X15502012402 NATURAL |
| Product code | : | EM10013200 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight percent |
|------------------|------------|----------------|
| Azodicarbonamide | 123-77-3 | 1 - 5 |
| Talc | 14807-96-6 | 0.1 - 1 |

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, Eyes, 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 | : Avoid skin contact. Product contains unreacted organic peroxides which may cause mild skin irritation. |
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| Medical Conditions Aggravated by Exposure: | : Individuals with chronic respiratory disorders (i.e. asthma, chr bronchitis, etc.) may be adversely affected by any airborne contaminant. | | |
|---|--|--|--|
| | 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 o 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. FIREFIGHTING MEASURES | | |
| Flash point | : not applicable | | |
| Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media | not applicable not applicable Not relevant Carbon dioxide blanket, Water spray, Dry powder, Foam. | | |
| Special Fire Fighting Procedures Unusual Fire/Explosion Hazards | Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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. | | |
| | 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. Keep away from heat. Excessive storage temperature and humidity can degrade product performance. Store below 149 °F (65 °C). Rotate stock. Product shelf life is normally 1 year maximum. |
| 8. EX | POSU | RE CONTROLS/PERSONAL PROTECTION |
| Respiratory protection | : | No personal respiratory protective equipment normally required when handling the product itself. See "Engineering Measures" section below for precautions to be taken when heating or processing this material. |
| 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. During processing and cross-linking, product can give off by-products such as alcohols, acetophenone, alpha-methylstyrene, acetone, methane, and ethane. By-product vapors may be flammable. User must provide necessary precautions such as adequate ventilation to prevent accumulation and ignition of vapors. Adequate ventilation and/or appropriate respiratory protection may also be necessary to minimize employee exposure to processing vapors. |
| Exposure limit(s) | | |
| | | |
| | | |
| | | |

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| Components | Value | Exposure time | Exposure type | List: |
|------------|-----------|-----------------------------------|----------------------|----------|
| Talc | 2 mg/m3 | Time Weighted Average (TWA): | Respirable fraction. | ACGIH |
| | 2 mg/m3 | Recommended exposure limit (REL): | Respirable. | NIOSH |
| | 2 mg/m3 | Time Weighted Average (TWA): | Respirable dust. | OSHA Z1A |
| | 0.1 mg/m3 | Time Weighted Average (TWA): | Respirable. | Z3 |
| | 0.3 mg/m3 | Time Weighted Average (TWA): | Total dust. | Z3 |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Form |
|---------------------|
| Appearance |
| Colour |
| Odour |
| Melting point/range |
| Boiling Point: |
| Water solubility |

pellets
NO PIGMENT
characteristic
Not determined
not applicable
insoluble

: solid

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH Not applicable
Not determined
Not established
not applicable
not applicable

: not applicable

. not application

10. STABILITY AND REACTIVITY

| Stability | : | The product is stable if stored and handled as prescribed. |
|----------------------------------|---|--|
| 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 | : | Strong acids, Oxidizing agents, Reducing agents |
| Hazardous decomposition products | : | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Traces of alcohols, acetophenone, alpha-methylstyrene, acetone, methane, ethane, or other byproducts may be liberated during processing or decomposition. |

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 |
|----------|------------------|------------|---------------------|
| 123-77-3 | Azodicarbonamide | sensitizer | Respiratory system. |

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| 14807-96-6 | Talc | Systemic effects | Eyes, Respiratory system, |
|------------|------|------------------|---------------------------|
| | | | 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 |
|----------|------------------|-------------|---------------|---------|
| 123-77-3 | Azodicarbonamide | LC50 | 200 mg/l | rat |
| | | Oral LD50 | > 6,400 mg/kg | rat |
| | | Dermal LD50 | > 2,000 mg/kg | rabbit |
| | | Dermal LD50 | 2,000 mg/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 |
|------------|---------------|------|------|-----|
| 14807-96-6 | Talc | 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:

Azodicarbonamide 123-77-3 Sensitizer to the respiratory system with repeated minimal inhalation. While no chronic health problems have been identified, individuals with respiratory problems should avoid inhalation exposure to this material.

| | 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 | : not applicable |
| | 13. DISPOSAL CONSIDERATIONS |
| Product | : 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. |

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Version Number 1.2 Page 6 of 7 Print Date 3/22/2014 Revision Date 03/18/2014 Contaminated packaging 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. **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 Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation SARA Title III Section 313 Toxic Chemicals: Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation Canadian Regulations: National Pollutant Release Inventory (NPRI) not applicable WHMIS Classification : D2A

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| DSL | : | All of the components of this product are listed on the Canadian Inventories or are exempt. However, at least one component of this product is on the Canadian Non-Domestic Substances List (NDSL). Quantity use in Canada is restricted by regulations. | | |
| National Inventories: | | | | |
| Australia AICS | : | Not determined | | |
| China IECS | : | Not determined | | |
| Europe EINECS | : | Listed | | |
| 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 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.