MATERIAL SAFETY DATA SHEET Geon™ MM483A LD RAM 2015 TYPE

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

| 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 | : | Geon™ MM483A LD RAM 2015 TYPE |
| Product code | : | FO20026973 |
| Chemical Name | : | Mixture |
| CAS-No. | : | Mixture |
| Product Use | : | Industrial Applications |

2. COMPOSITION/INFORMATION ON INGREDIENTS

There are no known hazardous components above regulatory thresholds in this product.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

| Routes of Exposure: | : Inhalation, Skin contact, Ingestion |
|---|--|
| Acute exposure | |
| Inhalation | : Inhalation of airborne droplets may cause irritation of the respiratory tract. |
| Ingestion | : May be harmful if swallowed. |
| Eyes | : May cause eye and skin irritation. |
| Skin | : Experience shows no unusual dermatitis hazard from routine handling. |
| Chronic exposure | : Refer to Section 11 for Toxicological Information. |
| Medical Conditions Aggravated by Exposure: | : None known. |

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| | 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 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 | : no data available |
| Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards | no data available no data available Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. 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 | : The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment. |
| Methods for cleaning up | : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in appropriate container for disposal. |
| | 7. HANDLING AND STORAGE |
| Handling | : Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. |



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| Storage | accumulation of : Keep container and contaminat | lean hoods, ducts, and other surfaces to minimize of these materials. rs dry and tightly closed to avoid moisture absorption ation. Store in a cool dry place. | |
|---------------------------------------|--|---|--|
| 8. EX | POSURE CONTROL | LS/PERSONAL PROTECTION | |
| Respiratory protection | : No personal re- | espiratory protective equipment normally required. | |
| Eye/Face Protection | : Safety glasses | with side-shields | |
| Hand protection | : Protective glov | ves | |
| Skin and body protection | : Long sleeved c | clothing | |
| Additional Protective Measures | : Safety shoes | | |
| General Hygiene Considerations | | ordance with good industrial hygiene and safety h hands before breaks and at the end of workday. | |
| Engineering measures | | reas with appropriate exhaust ventilation. Provide haust ventilation at machinery. | |
| Exposure limit(s) | | | |
| There are no known hazardo | us components above re | regulatory thresholds in this product. | |
| 9 | . PHYSICAL AND CI | HEMICAL PROPERTIES | |
| Form Appearance Colour Odour | : liquid : viscous, liquid : BROWN : very faint | Evapouration rate:Not establishedSpecific Gravity:Not determinedBulk density:Not applicableVapour pressure:Not determined | |
| Malting point/ranga | , not applicable | Vanour density . Not determined | |

: very faint : not applicable Melting point/range Boiling Point: : not applicable Water solubility : immiscible

Vapour density pН

: Not determined : Not determined

: Not applicable

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 | : | Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing. |

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Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F).

11. TOXICOLOGICAL INFORMATION

There are no known hazardous components above regulatory thresholds in this product.

| ot readily biodegradable. Avironmental toxicity has not been established for this mixture as a hole. data available data available ISPOSAL CONSIDERATIONS here possible recycling is preferred to disposal or incineration. The nerator of waste material has the responsibility for proper waste assification, transportation and disposal in accordance with plicable federal, state/provincial and local regulations. ecycling is preferred when possible. The generator of waste aterial has the responsibility for proper waste aterial has the responsibility for proper waste aterial has the responsibility for proper waste classification, ansportation and disposal in accordance with applicable federal, |
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| TRANSPORT INFORMATION |
| efer to specific regulation. |
| efer to specific regulation. |
| fer to specific regulation. |
| EGULATORY INFORMATION |
| |
| here are no known hazardous components above regulatory |
| |

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TSCA Status : A

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) | | | |
|---|----------|-------------|----------|
| Chemical Name | CAS-No. | Weight | NPRI ID# |
| | | percent | |
| Miscellaneous Zinc Compounds | 0-05-5 | 0.10 - 1.00 | 241 |
| 2-Ethylhexanoic acid zinc salt | 136-53-8 | 0.10 - 1.00 | |

| WHMIS Classification | : | Not controlled. |
|-----------------------|---|--|
| 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 |
| | | |



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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.