

MATERIAL SAFETY DATA SHEET

07/09/2010

1- PRODUCT & COMPANY INFORMATION

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|-----------------------|---|---|
| Product Name | N-t-BOC-L-Cyclohexylglycinol |  |
| Catalog Number | OC-0056 | |
| Company | OmegaChem inc. 480 rue Perreault Saint-Romuald (Quebec) Canada G6W 7V6 Tel. (418) 837-4444 Fax (418) 837-5196 info@omegachem.com www.omegachem.com |  |

2 – COMPOSITION / INGREDIENTS

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|-----------------------|------------------------------|---|--|
| Substance Name | N-t-BOC-L-Cyclohexylglycinol | | |
| CAS Number | SARA 313 | Formula | |
| 107202-39-1 | No | C ₁₃ H ₂₅ NO ₃ | |

3 – HAZARDS IDENTIFICATION

Emergency Overview

Dangerous for the environment. Harmful.

Irritating to eyes, respiratory system and skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful if swallowed.

HMIS rating (0,1,2,3 or 4)

- Health : 2
- Flammability : 0
- Reactivity : 0
- Special hazard(s) : N/A

NFPA rating (0,1,2,3 or 4)

- Health : 2
- Flammability : 0
- Reactivity : 0
- Special hazard(s) : N/A

For additional information on toxicity, please refer to section 11.

4 – FIRST AID

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| Oral exposure | If swallowed, wash mouth with water, provided the person is conscious and call a physician. |
| Inhalation exposure | Remove the person to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. |
| Dermal exposure | Immediately wash skin with soap and large amounts of water. |
| Eye exposure | Flush eyes with large amounts of water for at least 15 minutes. |

5 – FIRE FIGHTING MEASURES

| Flash point | Autoignition temperature | Flammability |
|----------------------------|---|--------------|
| N/A | N/A | N/A |
| Extinguishing media | Water spray; carbon dioxide; dry chemical powder or appropriate foam. | |
| Firefighting | <p>Protective equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.</p> <p>Specific hazard(s): Emits toxic fumes under fire conditions.</p> <p>Material: Irritant.</p> | |

6 – ACCIDENTAL RELEASE MEASURES

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| Personal precautions | Evacuate area. Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust. |
| Method for cleaning up | Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. |
| Procedure in case of leak or spill | N/A |

7 – HANDLING AND STORAGE

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| Handling | Avoid inhalation, contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Do not breathe dust |
| Storage | Suitable: Keep tightly closed. |

8 – EXPOSURE CONTROLS / PPE

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| Engineering controls | Safety shower and eye bath. Mechanical exhaust required. |
| Personal protective equipment | <p>Respiratory: government approved respirator.</p> <p>Hand: rubber gloves.</p> <p>Eye: chemical safety goggles.</p> |
| General hygiene measures | Wash contaminated clothing before reuse. Wash thoroughly after handling. |

9 – PHYSICAL / CHEMICAL PROPERTIES

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| Appearance | White solid | | |
| Molecular Weight | 243.34 AMU | Evaporation rate | N/A |
| pH | N/A | Viscosity | N/A |
| Boiling point | N/A | Surface tension | N/A |
| Melting point | 83-87°C | Partition coefficient | Log Kow : 2 |
| Freezing point | N/A | Decomposition temp. | N/A |
| Vapor pressure | N/A | Flash point | N/A |
| Vapor density | N/A | Explosion limits | N/A |
| Saturated Vapor Conc. | N/A | Flammability | N/A |
| SG / Density | N/A | Autoignition temp. | N/A |
| Odor threshold | N/A | Refractive index | N/A |
| Volatile | N/A | Optical rotation | -13°, c = 1, CHCl ₃ |
| VOC content | N/A | Solubility | N/A |
| Water content | N/A | Miscellaneous | |
| Solvent content | N/A | N/A = not available | |

10 – STABILITY AND REACTIVITY

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| Stability | Stable: stable. Materials to Avoid: strong oxidizing agents. |
| Hazardous decomposition products | Carbon monoxide Carbon dioxide Nitrogen oxides |

11-TOXICOLOGICAL INFORMATION

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| Route of exposure | |
| Skin contact | May cause skin irritation. |
| Skin absorption | May be harmful if absorbed through the skin |
| Eye | May cause eye irritation. |
| Inhalation | May be harmful if inhaled. May be irritating to mucous membranes and upper respiratory tract. |
| Ingestion | May be harmful if swallowed. |
| Signs and symptoms of exposure | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. |
| Toxicity Data | Oral Rat 696 mg/kg LD50 |
| Irritation Data | Eyes Remarks: Mild irritation effect |

12 – ECOLOGICAL INFORMATION

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| Acute Ecotoxicity Tests | Test Type: LC50 Fish Species: Pimephales promelas (Fathead minnow) Time: 96 h Value: 0.057 mg/l |
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13 – DISPOSAL CONSIDERATIONS

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| Appropriate method of disposal of substance or preparation | Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations. |
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14 – TRANSPORT INFORMATION

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| DOT | Proper Shipping Name: None Non-hazardous for transport: this substance is considered to be non-hazardous for transport. |
| IATA | Non-hazardous for air transport |

15 – REGULATORY INFORMATION

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| EU | Symbol of Danger: N Xn Indication of Danger: Dangerous for the environment. Harmful. R: 36/37/38 50/53 22 Risk Statements: Irritating to eyes, respiratory system and skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful if swallowed. S: 26 60 61 Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets. |
| USA | Indication of Danger: Dangerous for the environment. Harmful. Risk Statements: Irritating to eyes, respiratory system and skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful if swallowed. Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets. SARA LISTED: No |
| Canada | WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. DSL: No NDSL: No |

16 – OTHER INFORMATION

The product is to be used for R&D only. Not for drug, household or other uses.
The above information is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety measures. It is believed to be correct but does not purport to be inclusive and shall be used only as a guide.
OmegaChem Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.