

MATERIAL SAFETY DATA SHEET

07-09-2010

1- PRODUCT & COMPANY INFORMATION

Product Name	N-t-BOC-D-Cyclohexylglycinol	
Catalog Number	OC-0058	
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

Substance Name	N-t-BOC-D-Cyclohexylglycinol		
CAS Number	SARA 313	Formula	
188348-00-7	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

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><u>Protective equipment:</u> Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.</p> <p><u>Specific hazard(s):</u> Emits toxic fumes under fire conditions.</p> <p><u>Material:</u> Irritant.</p>	

6 – ACCIDENTAL RELEASE MEASURES

Personal precautions	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

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

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

9 – PHYSICAL / CHEMICAL PROPERTIES

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

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

11-TOXICOLOGICAL INFORMATION

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

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

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

DOT	Proper Shipping Name: None Non-hazardous for transport.
IATA	Non-hazardous for air transport.

15 – REGULATORY INFORMATION

EU	<p>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.</p>
USA	<p>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</p>
Canada	<p>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</p>

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.