Renogen Biolab Inc.

Material Safety Data Sheet

Printed: 18/10/2006 *Reviewed: 18/10/2006*

1. Identification of the substance/preparation and of the company/undertaking

Trade name: Gel Dissolving Solution GL
Catalog number: *NP3001*
Application of the substance / the preparation: *Laboratory chemicals*
Manufacturer/Supplier:
Renogen Biolab Inc.
310-2386 East Mall
Vancouver, BC, V6T 1Z3
Canada
Tel: (604)-827-3153
Emergency information:
Canada: CANUTEC-1-613-996-6666
USA: CHEMTREC-1-800-424-9300
Further information:
Please visit our website: www.renogenbio.com
Or contact Renogen distributors in your country.

2.Composition/information on ingredients

Chemical characterization
Description: *Solution composed of the following substances with nonhazardous additions.*

GUANIDINE THIOCYANATE
CAS #:593-84-0
EC No.:209-812-1
Content: 50-80%
Formula CH5N3.CHNS
Molecular Weight 118.16 AMU
Synonyms Guanidine, monothiocyanate ; Guanidine thiocyanate; Guanidinium thiocyanate

According to the OSHR 29 CFR 1910.1200, a mixture that contains less than one percent by weight or volume of a non-carcinogenic hazardous component is not considered hazardous, unless there is evidence to the contrary. We do not consider Solution 1 to be hazardous; however we recommend the use of gloves, lab coats, and eye protection when working with these or any chemical reagents.

3.Hazards identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Harmful by inhalation, in contact with skin and if swallowed. Contact with acids liberates very toxic gas. Harmful to aquatic organisms, may cause long-term adverse effects in the aquaticenvironment.

4. First aid measures

AFTER INHALATION
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

AFTER EYE CONTACT
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5.Fire-fighting measures

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS
Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. Accidental release measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
  Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
  Wear self-contained breathing apparatus, rubber boots, and

heavyrubber gloves.

METHODS 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.

7. Handling and storage

HANDLING
Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE
Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Light sensitive.

8. Exposure controls and personal protection

ENGINEERING CONTROLS
Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory Protection: Government approved respirator.
Hand Protection: Compatible chemical-resistant gloves.
Eye Protection: Chemical safety goggles.

9.Physical and chemical proterties

Appearance Physical State: Solid
Color: Colorless White
Form: Crystals
Odor: Odorless
Property Value At Temperature or Pressure
pH 4.5 - 7
BP/BP Range N/A
MP/MP Range 117 °C
Flash Point N/A
Flammability N/A
Autoignition Temp N/A
Oxidizing Properties N/A
Explosive Properties N/A
Explosion Limits N/A
Vapor Pressure N/A
SG/Density N/A

Partition Coefficient N/A
Viscosity N/A
Vapor Density N/A
Saturated Vapor Conc. N/A
Evaporation Rate N/A
Bulk Density N/A
Decomposition Temp. N/A
Solvent Content N/A
Water Content N/A
Surface Tension N/A
Conductivity N/A
Miscellaneous Data N/A
Solubility Solubility in Water:6 M in H2O, 20°C
complete, colorless

10. Stability and reactivity

STABILITY
Stable: Stable.
Conditions to Avoid: Light.
Materials to Avoid: Strong acids, Strong oxidizing agents, Heatingto decomposition or contact with acids or acid vapors can liberatepoisonous cyanide vapors.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,Nitrogen oxides, Sulfur oxides, Hydrogen cyanide, Ammonia.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

11. Toxicological information

RTECS NUMBER: XL1225000
ACUTE TOXICITY
LD50
Oral
Rat
593 mg/kg
LD50
Intraperitoneal
Mouse
300 MG/KG
SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: Harmful if absorbed through skin.
Eye Contact: May cause eye irritation.
Inhalation: Harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

12. Ecological information

No data available.

BIOACCUMULATION POTENTIAL: No indication of bioaccumulation.

ECOTOXICOLOGICAL EFFECTS
Test Type: LC50 Fish
Species: Poecilia reticulata
Time: 96 h
Value: 89.1 mg/l

Test Type: EC50 Daphnia
Species: Daphnia
Time: 48 h
Value: 42.4 mg/l

13. Disposal consideration

SUBSTANCE DISPOSAL
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.

14. Transport information

RID/ADR
Non-hazardous for road transport.

IMDG
Non-hazardous for sea transport.

IATA
Non-hazardous for air transport.

15. Regulations

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
ANNEX I INDEX NUMBER: 615-004-00-3
NOTA: A
INDICATION OF DANGER: Xn
Harmful.
R-PHRASES: 20/21/22 32 52/53
Harmful by inhalation, in contact with skin and if swallowed. Contact with acids liberates very toxic gas. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-PHRASES: 13 61
Keep away from food, drink, and animal feedingstuffs. Avoid

release to the environment. Refer to special instructions/safety data sheets.

COUNTRY SPECIFIC INFORMATION
Germany
WGK: 2
SWITZERLAND
SWISS POISON CLASS: 3
NORWAY
Declaration Number: 67461

16. Other information

For R&D use only. Not for drug, household or other uses.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Renogen Biolab Inc.shall not be held liable for any damage resulting from handling or from contact with the above product.