



MATERIAL SAFETY DATA SHEET

2522 Plantation Center Drive
Matthews, NC 28105
(704) 845 9440
www.ciscochem.com

1. PRODUCT NAME: Diethylene Glycol

2. CHEMICAL NAME:

3. SYNONYMS: DEG

4. CAS NUMBER: 111-46-6

5. COMPOSITION: Diethylene Glycol
Cas: 111-46-6
100%

6. PROPERTIES: BOILING POINT: 245.8C
MELTING/FREEZING POINT: N/A
DECOMPOSITION POINT: N/A
VAPOR PRESSURE: N/P
VAPOR DENSITY: 3.66
PERCENT VOLATILE ORGANIC CONTENT: .
SPECIFIC GRAVITY: 1.1184
VOLATILE ORGANIC CONTANT POUNDS PER GALLON: .
PH: N/P
VOLATILE ORGANIC CONTENT GRAMS PER LITRE: .
VISCOSITY: N/PEVAPORATION WEIGHT AND REFERENCE: <0.01 BUAC
SOLUBILITY IN WATER: COMPLETE
APPEARANCE AND ODOR: Water-White Liquid; Mild Odor
PERCENT VOLATILES BY VOLUME: NIL
CORROSION RATE: N/P
STABILITY INDICATOR: Yes
MATERIALS TO AVOID: None
STABILITY CONDITION TO AVOID: None
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal Decomp. or Burning may prod. Co. &/or CO*2
HAZARDOUS POLYMERIZATION INDICATOR: No
CONDITIONS TO AVOID POLYMERIZATION: None

7. HAZARDS: HEALTH HAZARDS ACUTE & CHRONIC: N/P
SIGNS & SYMPTOMS OF OVEREXPOSURE: Harm is expected only if taken internally ingestion:
Nausea, vomiting, & kidney injury Poss. Fatal.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/P
LD50 LC50 MIXTURE: N/P
ROUTE OF ENTRY INDICATORS:
INHALATION: N/P
SKIN: N/P
INGESTION: N/P
CARCINOGENICITY INDICATORS:
NTP: N/P
IARC: N/P
OSHA: N/P
CARCINOGENICITY EXPLANATION: N/P

IN CASE OF
TRANSPORT EMERGENCY
CONTACT CHEMTREC
USA: 1-800-424-9300
INTERNATIONAL: 1-703-527-3887



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8. FIRE FIGHTING FIRE FIGHTING PROCEDURES: A solid stream of water directed into hot Liq-Poss frothing.
INFORMATION: UNUSUAL FIRE OR EXPLOSION HAZARD: none.
EXTINGUISHING MEDIA: Use Co. or dry Chem. For SM Fire; LG Fire: Alcohol, Polymerization foam.
FLASH POINT: FLASH POINT TEXT: 280 F PMCC
AUTOIGNITION TEMPERATURE: N/A
LOWER LIMITS: 1.7
UPPER LIMITS: 10.6
9. PERSONAL RESPIRATORY PROTECTION: None required
PROTECTION VENTILATION: Mechanical-Acceptable
MEASURES: PROTECTIVE GLOVES: Rubber
EYE PROTECTION: Goggles
OTHER PROTECTIVE EQUIPMENT: Safety shower and eye bath.
WORK HYGENIC PRACTICES: N/P
SUPPLEMENTAL HEALTH & SAFETY INFORMATION: N/P
10. FIRST AID If inhaled, remove to fresh air. If not breathing, give artificial respiration.
PROCEDURES: If breathing is difficult, give oxygen. Get medical attention. If ingested,
DO NOT induce vomiting. Seek medical assistance.
11. EXPOSURE NE
LIMITS:
12. TOXICOLOGICAL Oral toxicity:
INFORMATION: Human deaths have occurred at an average ingested dose of 1.2 g/kg;
causes adverse effects on human kidneys and may cause liver damage.
Inhalation LC50:
Slightly toxic to rodents by inhalation.
Dermal LD50:
Diethylene glycol is not readily absorbed through intact skin. Slightly
toxic to animals by skin absorption. Dermal LD50, rabbits: >2 g/kg.
Chronic toxicity:
A chronic dietary feeding study with rats showed mild kidney injury at 1%
while concentrations of 2% and 4% caused more marked kidney injury.
Mutagenicity:
No evidence of mutagenicity in bacterial of mammalian cells.
13. ECOLOGICAL Fathead minnow:
INFORMATION: LC50 > 100 ppm (96h-static test)
Mosquito fish:
TLM > 32,000 ppm (96h)
Goldfish:
LC50 > 5,000 ppm (24h)
Guppy, P. reticulata:
LC50 = 61,072 ppm (7d)
Water flea, D. manga:
LC50 = 0.3-1ppm (96h-static test)
Algae Species:
S. capricornutum:
No Growth Inhibition at 100 ppm (static test)
M. aeruginosa:



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Threshold Growth Inhibition = 1700 ppm

S.quadricauda:

Threshold Growth Inhibition = 2700 ppm

ENVIRONMENTAL FATE

Diethylene glycol will degrade at a moderate rate. Laboratory studies show that at least 10 days are required for degradation in river water.

14. DISPOSAL CONSIDERAIONS: Incinerate in a furnace where permitted under appropriate federal, state and local regulations.

15. CARCINOGENIC PROPERTIES & NOTIFICATIONS: Not expected in humans.

16. TRANSPORT INFORMATION: Proper Shipping Name: Diethylene Glycol
ID No.: Not regulated
Hazard Class: Not regulated
Packaging Group: Not regulated
Label: Not regulated

17. HANDLING & STORAGE: Handling:
Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Decontaminate soiled clothing thoroughly before re-use. Destroy contaminated leather clothing.
Storage:
Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor.
Do not store with incompatible materials; see "Section 10 – Stability and Reactivity".

18. ACCIDENTAL RELEASE MEASURES: Small spills should be flushed with large quantities of water. Larger spills should be collected for disposal.

19. REGULATORY INFORMATION: The following chemicals associated with the product are subject to the right-to-know regulations in these states: DIETHYLENE GLYCOL (111-46-6): PA, RI
SARA 311/312
Acute health----- Yes
Chronic health----- Yes
Fire-----No
Sudden release of pressure----- No
Reactive-----No