



Carolina International Sales Co., Inc

MATERIAL SAFETY DATA SHEET

2522 Plantation Center Drive
Matthews, NC 28105
(704) 845 9440

www.ciscochem.com

1. PRODUCT NAME: Triethylene Glycol
2. CHEMICAL NAME: Triethylene Glycol
3. SYNONYMS:
4. CAS NUMBER: 112-27-6
5. COMPOSITION: Triethylene Glycol (112-27-6) - 100%

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

6. PROPERTIES: ODOR & APPEARANCE: clear, colorless, odorless liquid
ODOR THRESHOLD: none - odorless
VAPOUR PRESSURE: below 1×10^{-3} mmHg/below 1.3×10^{-4} kPa (20 c)
EVAPORATION RATE (butyl Acetate=1): note volatile
VAPOR DENSITY (air=1): 5.2
BOILING RANGE: 287 c/549 F
FREEZING POINT: -4 c/23 F
SPECIFIC GRAVITY: 1.125 (20 c/20 c)
WATER SOLUBILITY: complete
IN OTHER SOLVENTS: alcohols, toluene, xylene, acetone
VISCOSITY: 48 centipoise (20 c)
PH: None - (does not liberate hydrogen ions when dissolved)
NOTE: 7 - neutral, yields no hydrogen ions in solution
FLASH POINT: 166 C/331 F (Closed cup) - also given as 172 c/341 F
AUTOIGNITION TEMPERATURE: 371 C/700 F
FLAMMABLE LIMITS: 0.9% - 9.2% not known
COMBUSTION PRODUCTS: carbon monoxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments
FIREFIGHTING PRECAUTIONS: foam, dry chemical, water fog, water spray only to cool & dilute, product floats on water - water jet spreads flames; firefighters must wear SCBA
STATIC DISCHARGE: will not accumulate a static charge
MECHANICAL IMPACT: not sensitive
CHEMICAL STABILITY: stable; will not polymerize
REACTIVE WITH: strong oxidizing agents; avoid strong acids or alkalies at elevated temperature
DECOMPOSITION PRODUCTS: none apart from Hazardous Combustion Products

7. HAZARDS:

8. FIRE FIGHTING INFORMATION: Foam, dry chemical, water fog, water spray only to cool & dilute, product floats on water - water jet spreads flames; firefighters must wear SCBA.
9. PERSONAL PROTECTION MEASURES: HANDS: rubber or vinyl gloves may be used but are not required
EYES: safety glasses with side shields recommended
RESPIRATOR: not required unless mist is generated - use dust/mist filter
CLOTHING: no special protective clothing required
10. FIRST AID PROCEDURES: SKIN: Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or laundered.
EYES: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is irritation.
INHALATION: Remove from contaminated area promptly. CAUTION: Rescuer must not endanger



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himself! If breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION: Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.
NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The risk and danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

11. EXPOSURE TWAEV/TLV ppm: not listed
LIMITS: LD50 ORAL: 7900
SKIN (mg/kg): 22,500
LC50 mg/m³ INHALATION: not known

12. TOXICOLOGICAL EFFECTS ACUTE EXPOSURE
INFORMATION: SKIN CONTACT: no effect
SKIN ABSORPTION: slight; no toxic effects likely by this route
EYE CONTACT: may cause discomfort, blinking or tears; will not damage
INHALATION: little to no effect; low vapor pressure and high viscosity make inhalation unlikely
INGESTION: abdominal discomfort, nausea and vomiting may occur
EFFECTS OF CHRONIC EXPOSURE
GENERAL: high concentration aerosols (mists) may cause lung, kidney or liver injury
SENSITISING: not a sensitiser
CARCINOGENIC: not a tumorigen, not a carcinogen
REPRODUCTIVE EFFECT: no known effect on humans
SYNERGISTIC WITH: not known
ESTIMATED LD50: 15,000mg/kg & 17,000MG/KG (oral, rat), 18,500mg/kg & 20,000mg/kg (oral, mouse), 8400mg/kg (oral, rabbit), 7900mg/kg (oral, guinea pig); 22,500mg/kg (skin, rabbit)
ESTIMATED LC50: not known

13. ECOLOGICAL This product cannot accumulate in living tissue. This product is readily biodegradable in the presence of
INFORMATION: oxygen; half-life in fresh water 7-11 days, 25-92% Biodegradation in 4 weeks observed in tests after inoculation with sewage sludge; estimated half-life in air~11 hours.

14. DISPOSAL DO NOT FLUSH TO SEWER; mix with flammable solvent and incinerate in approved facility.
CONSIDERATIONS:

15. CARCINOGENIC Not a tumorigen, not a carcinogen.
PROPERTIES &
NOTIFICATIONS:

16. TRANSPORT USA 49 CFR
INFORMATION: Product identification number: UN - not regulated for transport
Shipping name: not regulated for transport
Classification: not regulated for transport
Label: none required
WHMIS Class (Canada): not controlled under WHMIS

17. HANDLING & Store in a cool, dry environment, away from sources of ignition, heat and oxidizing agents. Do not cut,
STORAGE: drill, weld or grind on or near this container. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower should be available near the workplace.



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18. ACCIDENTAL LEAK PRECAUTION: dyke to control spillage and prevent environmental contamination.
RELEASE HANDLING SPILL: ventilate contaminated area; recover free liquid with suitable pumps; absorb residue
MEASURES: on an inert sorbent, sweep, shovel, & store in closed containers for recycling and disposal.
19. REGULATORY ALLOWABLE TOLERANCE: Triethylene glycol is exempted from the requirement of a tolerance when
INFORMATION: used as a deactivator in accordance with good agricultural practice as inert (or occasionally active) ingredi-
ents in pesticide formulations applied to growing crops only.
- NIOSH RECOMMENDATIONS**
NIOSH recommends reducing exposure to lowest feasible conc & preventing contact with the skin. /glycol
ethers.
- ATMOSPHERIC STANDARDS:** This action promulgates standards of performance for equipment leaks
of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemical Manufacturing Industry (SOC-
MI). The intended effect of these standards is to require all newly constructed, modified, and reconstructed
SOCMI process units to use the best demonstrated system of continuous emission reduction for equipment
leaks of VOC, considering costs, non air quality health and environmental impact and energy requirements.
Triethylene glycol is produced, as an intermediate or final product, by process units covered under this
subpart.
- FIFRA REQUIREMENTS**
Triethylene glycol is exempted from the requirement of a tolerance when used as a deactivator in accor-
dance with good agricultural practice as inert (or occasionally active) ingredients in pesticide formulations
applied to growing crops only.
- FDA REQUIREMENTS**
Triethylene glycol is an indirect food additive for use only as a component of adhesives.