**MATERIAL SAFETY DATA SHEET**

**PRODUCT #: 12808-2**
**CAS #: 110-80-5**
**MF: C4H10O2**

**NAME:** 2-ETHOXYETHANOL, 99%

**SYNONYMS**
Athyleneglykol-monoacethylather (German) * Cellosolve * Cellosolve (DOT) * Cellosolve solvent * Cellosolv (Czech) * Dimethanol EE * Ektasolve EE * Ether monethtyl ether de l'ethyleneglycol (French) * 2-Ethoxyethanol * 2-Ethoxyethanol (ACGIH, OSHA) * Ethyl cellosolve * Ethylene glycol ethyl ether * Ethylene glycol monoehtyl ether * Ethylene glycol monooethyl ether (DOT) * Etoksetyloowy alkohol (Polish) * Glycol ether EE * Glycol ethyl ether * Glycol monoehtyl ether * Glycol monooethyl ether (OSHA) * Hydroxy ether * Jefferson EE * NGI-C54853 * Oxitol * Poly-solv EE * RCRW waste number U227 * RCRW waste number U359 * UN 1171 (DOT)

**IDENTIFICATION**

**TOXICITY DATA**

**INHALATION DATA**

Eye: MN 6000 PPM
Skin: Rt 500 MG OPEN MLD
Skin: Rt 50 MG MOD
Skin: Rt 50 MG/24H MLD
Eye: GPG 10 HG MLD

**IRRITATION DATA**

Oral: RT 1050: 2125 MG/KG
Oral: RT 1050: 2125 MG/KG
Oral: RT 1050: 2125 MG/KG
Oral: RT 1050: 2125 MG/KG

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TOXICITY HAZARDS

REVIEWS, STANDARDS, AND REGULATIONS

MSHA STANDARD AIR: TWA 50 PPM (70 MG/M3) (SKIN)  DTLSWS*: 5, 7, 8, 14
OSHA PEL: 8H TWA 200 PPM (740 MG/M3) (SKIN) FEERAC 54, 2923, 89
NIOSH REL TO GLYCOL Ethers: AIR: TWA REDUCE TO LOWEST LEVEL MHR*: 37 (5-7), 16, 89

EPA TSCA CHEMICAL INVENTORY, JUNE 1990
EPA TSCA SECTION 8(b) STATUS REPORT 8EHQ-0381-036
EPA TSCA TEST SUKMISSION (TSCATS) DATA BASE, DECEMBER 1990
NIOSH CURRENT INTELLIGENCE BULLETIN: #39
NIOSH ANALYTICAL METHODS: SEE ALCOHOLS IV, 1403
NTP CARCINOGENESIS STUDIES: TEST (PRECHRONIC STUDIES), OCTOBER 1990
OSHA ANALYTICAL METHOD #53

T ORGAN DATA

BEHAVIORAL (ALTERED SLEEP TIME)
BEHAVIORAL (CONVICTIONS OR EFFECT ON SEIZURE THRESHOLD)
BEHAVIORAL (ANALGESIA)
LUNGS, THORAX OR RESPIRATION (CHRONIC PULMONARY EDEMA OR CONGESTION)
LUNGS, THORAX OR RESPIRATION (DYSPNEA)
KIDNEY, URETER, BLADDER (CHANGES IN TUBULES)
KIDNEY, URETER, BLADDER (HEMATURIA)
BLOOD (CHANGES IN SLEEN)
PATENT YESTS, EPIDIDYMIS, SPERM DUCT
MATERNAL EFFECTS (UTERUS, CERVIX, VAGINA)
MATERNAL EFFECTS (PARTURITION)
EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)
EFFECTS ON FERTILITY (LITTER SIZE)
EFFECTS ON FERTILITY (OTHER MEASURES OF FERTILITY)
EFFECTS ON EMBRYO OR FETUS (TERATOLOGY)
EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)
SPECIFIC DEVELOPMENT ABNORMALITIES (BODY WALL)
SPECIFIC DEVELOPMENT ABNORMALITIES (MUSCULOSKELETAL SYSTEM)
SPECIFIC DEVELOPMENT ABNORMALITIES (CARDIOVASCULAR SYSTEM)
SPECIFIC DEVELOPMENT ABNORMALITIES (URGENITAL SYSTEM)
EFFECTS ON NEWBORN (BEHAVIORAL)

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

CUST#: 250120
PO#: 33674

PRODUCT #: 12808-2
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NAME: 2-ETHOXYETHANOL, 99%

--------- TOXICITY HAZARDS ---------

DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

--------- HEALTH HAZARD DATA ---------

ACUTE EFFECTS
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
CAUSES SKIN IRRITATION.
PROLONGED EXPOSURE CAN CAUSE:
NARCOTIC EFFECT

CHRONIC EFFECTS
DAMAGE TO THE LIVER
DAMAGE TO THE KIDNEYS
BLOOD EFFECTS
MAY CAUSE CONGENITAL MALFORMATION IN THE FETUS.
MAY CAUSE REPRODUCTIVE DISORDERS.
IN LABORATORY STUDIES WITH THIS MATERIAL, BIRTH DEFECTS, FETOTOXICITY, EMBRYOLETHALITY, ANEMIA, BONE MARROW DAMAGE, HEMOLYSIS, IMMUNOSUPPRESSION AND DAMAGE TO THE MALE REPRODUCTIVE TISSUES HAVE BEEN OBSERVED.

FIRST AID
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH copious AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.

--------- PHYSICAL DATA ---------

BOILING PT: 135 C
MELTING PT: -90 C
SPECIFIC GRAVITY: 0.930
VAPOR DENSITY: 3.1
VAPOR PRESSURE: 3.8 MM Hg 20 C

APPEARANCE AND ODOR
COLORLESS LIQUID

--------- FIRE AND EXPLOSION HAZARD DATA ---------

FLASHPOINT: 120 F

CONTINUED ON NEXT PAGE
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------------- FIRE AND EXPLOSION HAZARD DATA -------------

AUTOIGNITION TEMPERATURE: 460 F
LOWER EXPLOSION LEVEL: 1.8%
UPPER EXPLOSION LEVEL: 14%

EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.
WATER MAY BE EFFECTIVE FOR COOLING, BUT MAY NOT EFFECT EXTINGUISHMENT.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.
USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.

CAUTION:
COMBUSTIBLE.

------------- REACTIVITY DATA -------------

INCOMPATIBILITIES

OXIDIZING AGENTS
ACIDS
COPPER
AND ITS ALLOYS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE

------------- SPILL OR LEAK PROCEDURES -------------

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINERS FOR
DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD
THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A CHEMICAL INCINERATOR
EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
OBERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

CHEMICAL SAFETY GOGGLES.

CONTINUED ON NEXT PAGE
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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

RUBBER GLOVES.
SAFETY SHOWER AND EYE BATH.
USE ONLY IN A CHEMICAL FUME HOOD.
NIOSH/MSHA-APPROVED RESPIRATOR IN NONVENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV.
DO NOT BREATHE VAPOR.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
READILY ABSORBED THROUGH SKIN.
WASH THOROUGHLY AFTER HANDLING.
IRRITANT.
TERATOGEN.
REPRODUCTIVE HAZARD.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

REGULATORY INFORMATION
THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ALDRICH SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.

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