ATTN: SAFETY DIRECTOR
UNIVERSITY OF WISCONSIN WHITewater
P O BOX 296
WHITewater WI 53190

DATE: 07/31/90
CUST#: 523216
P#D: QC 8790

PRODUCT #: 29608-2
CAS #: 60-29-7
MF: C4H10O

SYNONYMS
AETHER * ANESTHESIA ETHER * ANESTHETIC ETHER * ANESTHETIC ETHER * DIETHYL ETHER (GERMAN) * DIETHYL ETHER * DIETHYL ETHER (DOT,OSHA) * DIETHYL OXIDE * DIETHYLOGLYCER ETHER (POLISH) * ETHER ETHER (ITALIAN) * ETHER * ETHER ETHER ETHER * ETHYL ETHER 

NAME: ETHER, ANHYDROUS, 99+% 

TOXICITY HAZARDS

TOXICITY DATA

EYE-HMN 100 PPM
SKN-RO 360 MG OPEN MLD
EYE-ROT 100 MG MOD
SKN-GPG 50 MG/24H SEV

TOXICITY DATA

OSHA 260 MG/KG
OSHA 1215 MG/KG
OSHA 6500 PPM/10H
OSHA 2420 MG/KG
OSHA 996 MG/KG

REVIEW: STANDARDS, AND REGULATIONS
ACGIH TLV-TWA 400 PPM
MSHA STANDARD AIR-TWA 400 PPM (1200 MG/M3) OSHA PEL-TWA 400 PPM (1200 MG/M3) OSHA PEL-TWA 400 PPM (1200 MG/M3) FEREC 54,2923,89
NFPA 1976 HZO 32590; NIS 112; TNE 172822; NOS 7; TNE 161572
CHEM. HZD 325305; NIS 101; TNE 187722; NOS 76; TNE 243494; TFE 31181
EPA GENETOX PROGRAM 1988; POSITIVE: E COLI POLA WITHOUT S9
EPA GENETOX PROGRAM 1988; NEGATIVE: ASPERGILLUS-FLORIDUS MUTATION

TARGET ORGAN DATA

ON SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTCS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTCS FOR COMPLETE INFORMATION.

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

PRODUCT #: 29608-2
CAS #: 60-29-7
ME: C4H4ClO

NAME: ETHER, ANHYDROUS, 99.4%

HEALTH HAZARD DATA

ACUTE EFFECTS
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
VAPOR OR MIST IS IRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.
CAUSES SKIN IRRITATION.
EXPOSURE CAN CAUSE:
COUGHING, CHEST PAINS, DIFFICULTY IN BREATHING.
NAUSEA, HEADACHE AND VOMITING

FIRST AID
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH ABUNDANT
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: 34.6 C
SPECIFIC GRAVITY: 0.706
VAPOR DENSITY: 2.6
VAPOR PRESSURE: 442 mm Hg 20 C
1276 mm Hg 30 C

APPEARANCE AND ODOR
COLORLESS LIQUID

FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT: -40 F
AUTOIGNITION TEMPERATURE: 320 F
LOWER EXPLOSION LEVEL: 1.8%
UPPER EXPLOSION LEVEL: 48%

EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.

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.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS
EXTREMELY FLAMMABLE.
VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND
FLASH BACK.
CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS.

INCOMPATIBILITIES
OXIDIZING AGENTS

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

PRODUCT #: 29608-2
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--- REACTIVITY DATA ---

HEAT
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.
SHUT OFF ALL SOURCES OF IGNITION.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
COVER WITH AN ACTIVATED CARBON ADSORBENT, TAKE UP AND PLACE IN CLOSED CONTAINERS. TRANSPORT OUTDOORS.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD:
BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE.
OBSERVE ALL FEDERAL, STATE, AND LOCAL LAWS.

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

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
DO NOT BREATHE VAPOR.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
WASH THROUGHFULLY AFTER HANDLING.
IRRITANT.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.
HYDROSCOPIC.
FORMS EXPLOSIVE PEROXIDES ON PROLONGED STORAGE.
HANDLE AND STORE UNDER NITROGEN.
REFRIGERATE.

--- ADDITIONAL PRECAUTIONS AND COMMENTS ---

ADDITIONAL INFORMATION:
DANGER: TENDS TO FORM EXPLOSIVE PEROXIDES ESPECIALLY WHEN ANHYDROUS.
INHIBITED WITH 0.0001% BHT.

CONTINUED ON NEXT PAGE
PRODUCT #: 29609-2
CAS #: 60-29-7
MF: C4H10O

NAME: ETHER, ANHYDROUS, 99+%  

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