



chemists helping chemists in research & industry

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DATE: 07/27/93
CUST#: 938609
PO#: P0074850

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE 1

IDENTIFICATION

PRODUCT #: B8592-7
CAS #: 75-65-0
MF: C4H10O

NAME: 2-METHYL-2-PROPANOL, 99.5%

SYNONYMS

ALCOOL BUTYLIQUE TERTIAIRE (FRENCH) * T-BUTANOL * TERT-BUTANOL *
BUTANOL TERTIAIRE (FRENCH) * TERT-BUTYL ALCOHOL (ACGIH, DOT, OSHA) * T-
BUTYL HYDROXIDE * 1,1-DIMETHYLETHANOL * METHANOL, TRIMETHYL- * 2-
METHYL-2-PROPANOL * NCI-C55367 * 2-PROPANOL, 2-METHYL- *
TRIMETHYLCARBINOL *

TOXICITY HAZARDS

RTECS #: E01925000
TERT-BUTYL ALCOHOL

TOXICITY DATA

ORL-RAT LD50: 3500 MG/KG
IPR-MUS LD50: 933 MG/KG
IVN-MUS LD50: 1538 MG/KG
ORL-RBT LD50: 3559 MG/KG

SCIEAS 116,663,52
SCCUR* 2,61
AIPTAK 135,330,62
IMSUI 41,31,72

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 100 PPM; STEL 150 PPM 85INA8 5,78,86
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
FEREAC 54,7740,89
MSHA STANDARD-AIR: TWA 100 PPM (300 MG/M3) DTLVS* 3,32,71
OSHA PEL: 8H TWA 100 PPM (300 MG/M3) FEREAC 54,2923,89
OSHA PEL FINAL: 8H TWA 100 PPM (300 MG/M3); STEL 150 PPM (450 MG/M3)
FEREAC 54,2923,89
OEL-AUSTRALIA: TWA 100 PPM (300 MG/M3); STEL 150 PPM (450 MG/M3)
JANUARY 1993
OEL-AUSTRIA: TWA 100 PPM (300 MG/M3) JANUARY 1993
OEL-BELGIUM: TWA 100 PPM (303 MG/M3); STEL 150 PPM (455 MG/M3) JANUARY
1993
OEL-DENMARK: TWA 50 PPM (150 MG/M3); SKIN JANUARY 1993
OEL-FRANCE: TWA 100 PPM (300 MG/M3) JANUARY 1993
OEL-GERMANY: TWA 100 PPM (300 MG/M3) JANUARY 1993
OEL-THE NETHERLANDS: TWA 100 PPM (300 MG/M3) JANUARY 1993
OEL-THE PHILIPPINES: TWA 100 PPM (300 MG/M3) JANUARY 1993
OEL-SWEDEN: TWA 50 PPM (150 MG/M3); STEL 75 PPM (250 MG/M3); SKIN
JANUARY 1993
OEL-SWITZERLAND: TWA 100 PPM (300 MG/M3); STEL 200 PPM (600 MG/M3)
JANUARY 1993
OEL-TURKEY: TWA 100 PPM (300 MG/M3) JANUARY 1993
OEL-UNITED KINGDOM: TWA 100 PPM (300 MG/M3); STEL 150 PPM (450 MG/M3)

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PAGE 2

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PRODUCT #:

MF: C4H100

NAME: 2-METHYL-2-PROPANOL, 99.5%

TOXICITY HAZARDS

JANUARY 1993
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA, NEW ZEALAND, SINGAPORE,
VIETNAM CHECK ACCIHL TLV
NIOSH REL TO T-BUTYL ALCOHOL-AIR:10H TWA 100 PPM;STEL 150 PPM NIOSH*
DHHS #92-100,92
NIOSH 1974: HZD 14400; NIS 11; TNF 820; NOS 25; TNE 3121
NIOSH 1983: HZD 14400; NIS 128; TNF 10682; NOS 84; TNE 171420; TFE
26045
EPA GENETOX PROGRAM 1988, NEGATIVE: N CRASSA-REVERSION
EPA TSCA CHEMICAL INVENTORY, JUNE 1990
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 1993
NIOSH ANALYTICAL METHODS: SEE ALCOHOLS I, 1400
NTP CARCINOGENESIS STUDIES:TEST COMPLETED (PEER REVIEW), JANUARY 1993

TARGET ORGAN DATA

EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

HEALTH HAZARD DATA

ACUTE EFFECTS

HARMFUL IF INHALED OR SWALLOWED.
MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
CAUSES SEVERE EYE IRRITATION.
CAUSES SKIN IRRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.
EXPOSURE CAN CAUSE:
NAUSEA, DIZZINESS AND HEADACHE

CHRONIC EFFECTS

MAY CAUSE REPRODUCTIVE DISORDERS.
TARGET ORGAN(S):
CENTRAL NERVOUS SYSTEM

FIRST AID

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.

CONTINUED ON NEXT PAGE

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HEALTH HAZARD DATA

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.
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 POINT: 83 C
MELTING POINT: 25 C TO 26 C
SPECIFIC GRAVITY: 0.775
VAPOR DENSITY: 2.5
VAPOR PRESSURE: 31 MM @ 20 C
44 MM @ 26 C

APPEARANCE AND ODOR
WHITE SOLID

FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT 53 F
AUTOIGNITION TEMPERATURE: 896 F
LOWER EXPLOSION LEVEL: 2.4%
UPPER EXPLOSION LEVEL: 8%

EXTINGUISHING MEDIA

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE 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.
EXTREMELY FLAMMABLE.
USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND

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FIRE AND EXPLOSION HAZARD DATA

FLASH BACK.
CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS.

REACTIVITY DATA

INCOMPATIBILITIES

ACIDS
ACID CHLORIDES
ACID ANHYDRIDES
OXIDIZING AGENTS
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 ENVIRONMENTAL REGULATIONS.

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.
USE ONLY IN A CHEMICAL FUME HOOD.
DO NOT BREATHE VAPOR.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
WASH THOROUGHLY AFTER HANDLING.

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

HARMFUL SOLID OR LIQUID (PHYSICAL STATE IS TEMPERATURE DEPENDENT).

SEVERE EYE IRRITANT.

REPRODUCTIVE HAZARD.

KEEP TIGHTLY CLOSED.

KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.

STORE IN A COOL DRY PLACE.

LABEL PRECAUTIONARY STATEMENTS

FLAMMABLE (USA DEFINITION)

HIGHLY FLAMMABLE (EUROPEAN DEFINITION)

HARMFUL

HARMFUL BY INHALATION AND IF SWALLOWED.

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

RISK OF SERIOUS DAMAGE TO EYES.

REPRODUCTIVE HAZARD.

TARGET ORGAN(S):

CENTRAL NERVOUS SYSTEM

KEEP AWAY FROM SOURCES OF IGNITION. NO SMOKING.

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF

WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

REGULATORY INFORMATION

THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

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