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DATE 06/04/96
CUST#: 2-097-94804
PO#: UNF-64248

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

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 520-5

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: T1503
NAME: TRIZMA BASE REAGENT GRADE

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 77-86-1
MF: C4H11NO3
EC NO: 201-064-4

SYNONYMS

ADDEX-THAM * 2-AMINO-2-(HYDROXYMETHYL)PROPANE-1,3-DIOL * 2-AMINO-2-
(HYDROXYMETHYL)-1,3-PROPANEDIOL * 2-AMINO-2-METHYLOL-1,3-PROPANEDIOL *
AMINOTRIMETHYLOLMETHANE * AMINOTRIS(HYDROXYMETHYL)METHANE *
METHYLAMINE, 1,1,1-TRIS(HYDROXYMETHYL)- * PEHANORM * TALATROL * THAM *
THAM-E * THAM SET * TRIMETHYLOLAMINOMETHANE * TRIS * TRISAMINE *
TRIS-AMINO * TRISAMINOL * TRIS BUFFER * TRIS-HYDROXYMETHYL-
AMINOMETHAN (GERMAN) * TRIS-HYDROXYMETHYLAMINOMETHANE *
TRIS(HYDROXYMETHYL)METHANAMINE * TRIS(HYDROXYMETHYL)METHYLAMINE *
TRISPUFFER * TRIS-STERIL * TROMETAMOL * TROMETAMOLE * TROMETHAMINE *
TROMETHANE * TROMETHANMIN * TUTOFUSIN TRIS *

SECTION 3. HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS

IRRITANT
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING.

SECTION 4. FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF
WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.
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.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

WATER SPRAY.
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

CONTINUED ON NEXT PAGE

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Table listing branch offices for SIGMA-ALDRICH in various countries including Germany, Spain, Italy, France, Switzerland, Belgium, Austria, Brazil, Mexico, USA, India, and South Korea.



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M A T E R I A L S A F E T Y D A T A S H E E T PAGE 2

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 520-5

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NAME: TRIZMA BASE REAGENT GRADE

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. ACCIDENTAL RELEASE MEASURES

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. HANDLING AND STORAGE

REFER TO SECTION 8.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL SAFETY GOGGLES.
COMPATIBLE CHEMICAL-RESISTANT GLOVES.
NIOSH/MSHA-APPROVED RESPIRATOR.
SAFETY SHOWER AND EYE BATH.
MECHANICAL EXHAUST REQUIRED.
DO NOT BREATHE DUST.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
IRRITANT.
KEEP TIGHTLY CLOSED.
HYGROSCOPIC
STORE IN A COOL DRY PLACE.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR
WHITE CRYSTALS

PHYSICAL PROPERTIES

BOILING POINT: 219 C TO 220 C/10MM.
MELTING POINT: 171.2 C TO 172.3 C

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES
BASES
OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CONTINUED ON NEXT PAGE

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M A T E R I A L S A F E T Y D A T A S H E E T P A G E 3

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THERMAL DECOMPOSITION MAY PRODUCE CARBON MONOXIDE, CARBON DIOXIDE,
AND NITROGEN OXIDES.

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -

ACUTE EFFECTS
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
CAUSES EYE AND SKIN IRRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.

RTECS #: TY2900000
1,3-PROPANEDIOL, 2-AMINO-2-(HYDROXYMETHYL)-

TOXICITY DATA
ORL-RAT LD50:5900 MG/KG BCEFAI 110,653,71
IVN-RAT LD50:1800 MG/KG NIIRDN - 419,90
IVN-MUS LD50:1210 MG/KG ABMGJ 17,217,66

TARGET ORGAN DATA
BEHAVIORAL (SOMNOLENCE)
BEHAVIORAL (MUSCLE WEAKNESS)
BEHAVIORAL (COMA)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - -

DATA NOT YET AVAILABLE.

SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - -

THE MATERIAL SHOULD BE IGNITED IN THE PRESENCE OF SODIUM CARBONATE
AND SLAKED LIME (CALCIUM HYDROXIDE). THE SUBSTANCE SHOULD BE MIXED
WITH VERMICULITE AND THEN WITH THE DRY CAUSTICS, WRAPPED IN PAPER AND
BURNED IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER
AND SCRUBBER.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - TRANSPORT INFORMATION - - - - -

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - REGULATORY INFORMATION - - - - -

EUROPEAN INFORMATION

IRRITANT
R 36/37/38
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
S 26
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF

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MATERIAL SAFETY DATA SHEET PAGE 4

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WATER AND SEEK MEDICAL ADVICE.
S 36
WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

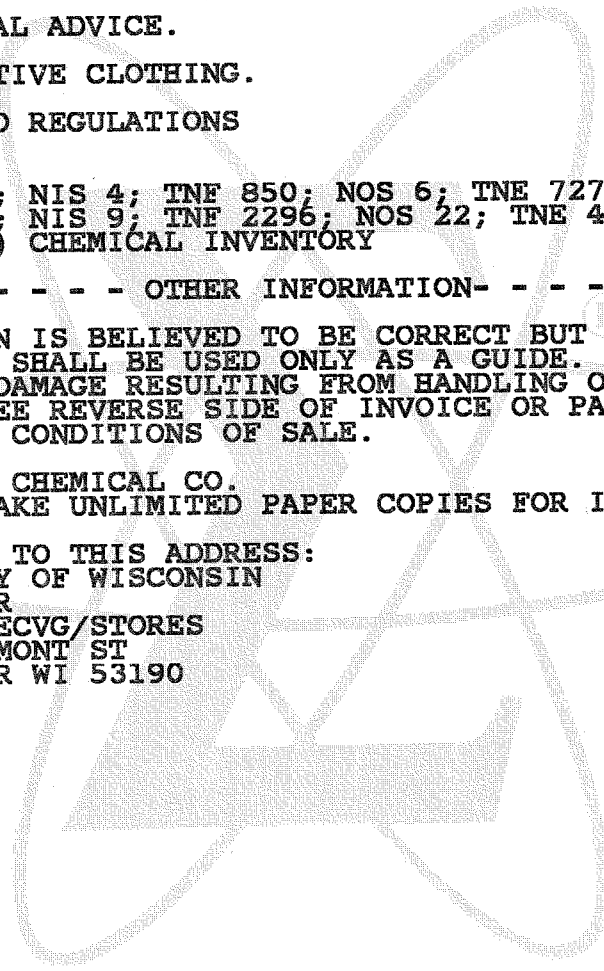
OEL=MAK
NOHS 1974: HZD 81165; NIS 4; TNF 850; NOS 6; TNE 7274
NOES 1983: HZD 81165; NIS 9; TNF 2296; NOS 22; TNE 40897; TFE 30773
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

SECTION 16. - - - - - OTHER INFORMATION - - - - -

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