

Valid 11/2002 - 01/2003

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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

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -

CATALOG #: T5125

NAME: THIMEROSAL

SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -

CAS #: 54-64-8

MF: C9H9HGNAO2S

EC NO: 200-210-4

SYNONYMS

((O-CARBOXYPHENYL)THIO)ETHYLMERCURY SODIUM SALT * ELICIDE * ETHYL(2-) Tj ET BT /PjCour

ACID SODIUM SALT * ETHYLMERCURITHIOSALICYLIC ACID SODIUM SALT *
ETHYLMERKURITHIOSALICILAN SODNY (CZECH) * ETHYL (SODIUM O-) Tj ET BT /PjCourier 10 Tf

MERTHIOLATE SODIUM * MERTORGAN * MERZONIN * MERZONIN SODIUM * SET *
SODIUM ETHYLMERCURIC THIOSALICYLATE * SODIUM O-(ETHYLMERCURITHIO)
BENZOATE * SODIUM ETHYLMERCURITHIOSALICYLATE * SODIUM MERTHIOLATE *
THIMEROSAL * THIMEROSALATE * THIOMERSAL * THIOMERSALATE *

SECTION 3. - - - - - HAZARDS IDENTIFICATION - - - - -

LABEL PRECAUTIONARY STATEMENTS

HIGHLY TOXIC (USA)

VERY TOXIC (EU)

VERY TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

DANGER OF CUMULATIVE EFFECTS.

MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

CALIF. PROP. 65 REPRODUCTIVE HAZARD.

TARGET ORGAN(S):

NERVES

KIDNEYS

SENSITIZER.

CAUSES IRRITATION.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER.

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

WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING.

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE

IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

SECTION 4. - - - - - FIRST-AID MEASURES- - - - -

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CALL A PHYSICIAN IMMEDIATELY.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL

RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER

FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND

SHOES. CALL A PHYSICIAN.

IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER

FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING

THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA

WATER SPRAY.

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

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.

THIS MATERIAL, LIKE MOST MATERIALS IN POWDER FORM, IS CAPABLE OF CREATING A DUST EXPLOSION.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -

WEAR SELF-CONTAINED BREATHING APPARATUS, 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.

EVACUATE AREA.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -

REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -

SAFETY SHOWER AND EYE BATH.

USE ONLY IN A CHEMICAL FUME HOOD.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

WASH THOROUGHLY AFTER HANDLING.

DO NOT BREATHE DUST.

DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

NIOSH/MSHA-APPROVED RESPIRATOR.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

CHEMICAL SAFETY GOGGLES.

KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR

SOLID.

PHYSICAL PROPERTIES

MELTING POINT: 234 C

FLASHPOINT >482F

>250C

SOLUBILITY:

WATER -Z1076

SPECIFIC GRAVITY: 0,5 G

SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -

STABILITY

STABLE.

CONDITIONS TO AVOID

MAY DISCOLOR ON EXPOSURE TO LIGHT.

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS

STRONG ACIDS

STRONG BASES

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE

MERCURY/MERCURY OXIDES

SULFUR OXIDES

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

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

ACUTE EFFECTS

CAUSES SKIN IRRITATION.

MAY BE FATAL IF ABSORBED THROUGH SKIN.

CAUSES EYE IRRITATION.

MAY BE FATAL IF INHALED.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER

RESPIRATORY TRACT.

MAY BE FATAL IF SWALLOWED.
POSSIBLE ALLERGIC REACTION TO DUST IF INHALED, INGESTED OR IN CONTACT WITH THE SKIN. HYPERSENSITIVITY REACTIONS MANIFESTED BY ERYTHEMA, PAPULAR OR VESICULAR ERUPTIONS OCCUR OCCASIONALLY. ALLERGIC CONJUNCTIVITIS HAS BEEN REPORTED.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

CHRONIC EFFECTS
TARGET ORGAN(S):
NERVES
KIDNEYS

RTECS #: OV8400000
MERCURY, ((O-CARBOXYPHENYL)THIO)ETHYL-, SODIUM SALT

IRRITATION DATA
EYE-RBT 8 UG MLD AJOPAA 78,98,1974

TOXICITY DATA
IAL-CHD LDLO:60 MG/KG/4W-I JOPDAB 104,311,1984
ORL-RAT LD50:75 MG/KG PCOC** -,1130,1966
SCU-RAT LD50:98 MG/KG CTOXAO 4,185,1971
UNR-RAT LD50:40 MG/KG 30ZDA9 -,290,1971
ORL-MUS LD50:91 MG/KG NYKZAU 58,235,1962
IPR-MUS LD50:54 MG/KG NYKZAU 58,235,1962
SCU-MUS LD50:66 MG/KG QJPPAL 12,212,1939
IVN-MUS LD50:45 MG/KG QJPPAL 12,212,1939

TARGET ORGAN DATA

BRAIN AND COVERINGS (OTHER DEGENERATIVE CHANGES)
BEHAVIORAL (ANOREXIA, HUMAN)
BEHAVIORAL (CHANGE IN MOTOR ACTIVITY)
BEHAVIORAL (ATAXIA)
BEHAVIORAL (COMA)
LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)
GASTROINTESTINAL (NAUSEA OR VOMITING)
KIDNEY, URETER, BLADDER (CHANGES IN TUBULES)
EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)
EFFECTS ON FERTILITY (ABORTION)
EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)

TUMORIGENIC EFFECTS (UTERINE TUMORS)

NUTRITIONAL AND GROSS METABOLIC (CHANGES IN: METABOLIC ACIDOSIS)

TUMORIGENIC (NEOPLASTIC BY RTECS CRITERIA)

TUMORIGENIC (TUMORS AT SITE OF APPLICATION)

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 - - - - -
CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.
DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN 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

EC INDEX NO: 080-004-00-7
VERY TOXIC
R 26/27/28
VERY TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
R 33
DANGER OF CUMULATIVE EFFECTS.
R 50/53
VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
S 13

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

S 28

AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF SOAP SUDS.

S 36

WEAR SUITABLE PROTECTIVE CLOTHING.

S 45

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

S 60

THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS HAZARDOUS WASTE.

S 61

AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEETS.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

ACGIH TLV-TWA 0.1 MG(HG)/M3 (SKIN) DTLVS* TLV/BEI,1999

MSHA STANDARD-AIR:TWA 0.05 MG(HG)/M3

DTLWS* 3,22,1973

OSHA PEL (GEN INDU):8H TWA 0.01 MG(HG)/M3

CFRGBR 29,1910.1000,1994

OSHA PEL (CONSTRUC):8H TWA 0.01 MG(HG)/M3 (SKIN)

CFRGBR 29,1926.55,1994

OSHA PEL (SHIPYARD):8H TWA 0.01 MG(HG)/M3 (SKIN)

CFRGBR 29,1915.1000,1993

OSHA PEL (FED CONT):8H TWA 0.01 MG(HG)/M3 (SKIN)

CFRGBR 41,50-204.50,1994

OEL-AUSTRALIA: TWA 0.05 MG(HG)/M3, SKIN, JAN1993

OEL-BELGIUM: TWA 0.05 MG(HG)/M3, SKIN, JAN1993

OEL-DENMARK: TWA 0.05 MG(HG)/M3, SKIN, JAN1999

OEL-FINLAND: TWA 1 MG(HG)/M3, JAN1999

OEL-FRANCE: VME 0.1 MG(HG)/M3, JAN1999

OEL-GERMANY: MAK 0.01 PPM (0.1 MG(HG)/M3), JAN1999

OEL-HUNGARY: TWA 0.02 MG(HG)/M3, STEL 0.04 MG(HG)/M3, JAN1993

OEL-JAPAN: OEL 0.05 MG(HG)/M3, JAN1999

OEL-THE NETHERLANDS: MAC-TGG 0.05 MG(HG)/M3, MAC-K 0.15 MG(HG)/M3, SKIN, JAN1999

OEL-NORWAY: TWA 0.05 MG(HG)/M3, JAN1999

OEL-THE PHILIPPINES: TWA 0.05 MG(HG)/M3, JAN1993

OEL-POLAND: MAC(TWA) 0.05 MG(HG)/M3, MAC(STEL) 0.15 MG(HG)/M3, JAN1999

OEL-RUSSIA: TWA 0.05 MG(HG)/M3, STEL 0.01 MG(HG)/M3, JAN1993

OEL-SWEDEN: NGV 0.05 MG(HG)/M3, SKIN, JAN1999

OEL-THAILAND: STEL 0.05 MG(HG)/M3, JAN1993

OEL-UNITED KINGDOM: LTEL 0.05 MG(HG)/M3, STEL 0.15 MG(HG)/M3, JAN1993

OEL IN ARGENTINA, BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV;

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV

NIOSH REL TO MERCURY, ARYL AND INORGANIC-AIR:CL 0.1 MG/M3 (SK)

NIOSH* DHHS #92-100,1992

NOHS 1974: HZD 84569; NIS 83; TNF 5617; NOS 30; TNE 242717

NOES 1983: HZD 84569; NIS 32; TNF 3695; NOS 41; TNE 152997; TFE 114190

EPA GENETOX PROGRAM 1988, POSITIVE: S CEREVISIAE GENE CONVERSION

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 2001

U.S. INFORMATION

THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS - MERCURY COMPOUNDS.

THIS PRODUCT IS OR CONTAINS CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE DEVELOPMENTAL TOXICITY.

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

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