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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 #: A0382  
NAME: ATROPINE METHYL NITRATE

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

CAS #: 52-88-0  
MF: C18H27NO3  
EC NO: 200-156-1

SYNONYMS

ATROPINE METHONITRATE \* ATROPINE METHYL NITRATE \* EKOMINE \* EUMIDRINA  
\* EUMYDRIN \* EUMYDRINE \* EUROPEN \* HARVATRATE \* 3-ALPHA-HYDROXY-8-  
METHYL-1-ALPHA-H,5-ALPHA-H-TROPANUM BROMIDE (+,-)-TROPATE \* DL-  
HYOSCYAMINE METHYLNITRATE \* DL-HYOSYAMINE METHYLNITRATE \* METANITE \*  
METHYL ATROPINE NITRATE \* N-METHYLATROPINE NITRATE \* N-  
METHYLATROPINIUM NITRATE \* 8-METHYLATROPINIUM NITRATE \* METROPINE \*  
PYLOSTROPIN \* 1-ALPHA-H,5-ALPHA-H-TROPANUM, 3-ALPHA-HYDROXY-8-METHYL-  
, NITRATE, (+-)-TROPATE (ESTER) \*

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

LABEL PRECAUTIONARY STATEMENTS

HARMFUL  
HARMFUL BY INHALATION AND IF SWALLOWED.  
TARGET ORGAN(S):  
NERVES  
WEAR SUITABLE PROTECTIVE CLOTHING.  
DO NOT BREATHE DUST.

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

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.  
CALL A PHYSICIAN.  
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER  
FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND  
SHOES. CALL A PHYSICIAN.  
IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT,  
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

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

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- - - - -

EVACUATE AREA.  
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.

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

REFER TO SECTION 8.

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

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.

USE ONLY IN A CHEMICAL FUME HOOD.

SAFETY SHOWER AND EYE BATH.

DO NOT BREATHE DUST.

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

AVOID PROLONGED OR REPEATED EXPOSURE.

WASH THOROUGHLY AFTER HANDLING.

KEEP TIGHTLY CLOSED.

STORE IN A COOL DRY PLACE.

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

APPEARANCE AND ODOR

SOLID.

PHYSICAL PROPERTIES

MELTING POINT: 163'C

SOLUBILITY:

WATER -SOLUBLE

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

STABILITY

STABLE.

CONDITIONS TO AVOID

PROTECT FROM LIGHT.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:

CARBON MONOXIDE, CARBON DIOXIDE

NITROGEN OXIDES

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

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

ACUTE EFFECTS

HARMFUL IF INHALED OR SWALLOWED.

MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

MAY CAUSE EYE IRRITATION.

MAY CAUSE SKIN IRRITATION.

MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER

RESPIRATORY TRACT.

EXPOSURE CAN CAUSE:

BLURRED VISION, SUPPRESSED SALIVATION, VASODILATION,

HYPERPYREXIA, EXCITEMENT, AGITATION, AND DELIRIUM.

MAY CAUSE NERVOUS SYSTEM DISTURBANCES.

TARGET ORGAN(S):

NERVES

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND

TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

ADDITIONAL INFORMATION

BY ANALOGY TO ADIPHENINE AND ATROPINE.

EXPOSURE MAY CAUSE DRYNESS OF THE MOUTH WITH DIFFICULTY IN SWALLOWING,

THIRST, DILATION OF THE PUPILS WITH LOSS OF ACCOMMODATION AND

PHOTOPHOBIA, INCREASED INTRAOCULAR PRESSURES, FLUSHING AND DRYNESS OF

THE SKIN, BRADYCARDIA FOLLOWED BY TACHYCARDIA, WITH PALPITATIONS AND

ARRHYTHMIAS, A DESIRE TO URINATE WITH THE INABILITY TO DO SO, AS WELL

AS REDUCTION IN THE TONE AND MOTILITY OF THE GASTRO-INTESTINAL TRACT

LEADING TO CONSTIPATION. OCCASIONALLY VOMITING, GIDDINESS, AND

STAGGERING MAY OCCUR.

RTECS #: CK2800000

ATROPINIUM, 8-METHYL-, NITRATE

TOXICITY DATA

ORL-RAT LD50:1902 MG/KG

TXAPA9 1,42,1959

ORL-MUS LD50:1320 MG/KG

PSEBAA 120,511,1965

IPR-MUS LD50:9 MG/KG

ATXKA8 29,39,1972

IVN-MUS LD50:9300 UG/KG

JPETAB 110,282,1954

SCU-GPG LD50:95 MG/KG

AIPTAK 137,375,1962

TARGET ORGAN DATA

SENSE ORGANS AND SPECIAL SENSES (MYDRIASIS)  
AUTONOMIC NERVOUS SYSTEM (PARASYMPATHOLYTIC)  
EFFECTS ON FERTILITY (MATING PERFORMANCE)  
EFFECTS ON FERTILITY (OTHER MEASURES OF FERTILITY)  
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 - - - - -  
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

HARMFUL  
R 26/28  
VERY TOXIC BY INHALATION AND IF SWALLOWED.  
S 25  
AVOID CONTACT WITH EYES.  
S 45  
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE  
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK  
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

SECTION 16. - - - - - OTHER INFORMATION- - - - -  
THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO  
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