
MATERIAL SAFETY DATA SHEET

HELENA LABORATORIES
 1530 Lindbergh Dr./P.O. Box 752
 Beaumont, TX 77704-0752
 USA Toll Free 800-231-5663

DATE PREPARED: 7/11/2003
 REVISION: 5

1. IDENTIFICATION:

PRODUCT NAME: TITAN GEL MULTI-SLOT SP-17 KIT

PRODUCT NO.: 3091

2. INGREDIENTS (THE ABOVE KIT CONTAINS THE FOLLOWING ITEMS) :

PRODUCT NUMBER	PRODUCT IDENTIFICATION (LABEL NAME)	COMMENTS
3048	AMIDO BLACK STAIN	NON-HAZARDOUS
500779	TITAN GEL MULTI-SLOT SP-17 GEL	
	HAZARDOUS INGREDIENT	CAS # %
	BARBITAL	57-44-3 1.5 MSDS ATTACHED
	THIMEROSAL	54-64-8 <1.0 MSDS ATTACHED
500235	TITAN GEL SERUM PROTEIN BUFFER	
	HAZARDOUS I NGREDIENT	CAS # %
	BARBITAL	57-44-3 85 MSDS ATTACHED
	SODIUM AZIDE	26628-22-8 5.2 MSDS ATTACHED
	THIMEROSAL	54-64-8 1.0 MSDS ATTACHED

ATTACHED ARE THE MSDS'S FOR THE ABOVE NAMED HAZARDOUS INGREDIENTS.

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DATE PREPARED: 1/7/1992
 REVISION: 2

1. IDENTIFICATION:

NAME: BARBITAL

CAS #: 57-44-3

MOLECULAR WEIGHT: 184.22
 MOLECULAR FORMULA: C8H12N2O3

CHEMICAL NAMES: 2,4,6(1H,3H,5H)-PYRIMIDENETRIONE, 5,5-DIETHYL- *
 5,5-DIETHYLBARBITURIC ACID

SYNONYMS: DIETHYLBARBITONE * DIETHYLMALONYLUREA * BARBITONE *
 VERONAL * SEDEVAL

2. HAZARDOUS INGREDIENTS:

CHEMICAL NAME/COMMON NAME CAS #	%	EXPOSURE LIMITS	
		OSHA PEL	ACGIH TLV
BARBITAL 57-44-3	100.0	NA	

3. PHYSICAL DATA:

BOILING POINT: NA SPECIFIC GRAVITY (H₂O = 1): NIF
 VAPOR PRESSURE (MM HG.): NA MELTING POINT: 188-192°C
 VAPOR DENSITY (AIR = 1): NA SOLUBILITY IN WATER: SLIGHTLY SOLUBLE
 APPEARANCE AND ODOR: WHITE CRYSTALLINE POWDER OR COLORLESS CRYSTALS

NA = Not Applicable
 NL = Not Listed

NE = Not Established
 NIF = No Information Found

4. HEALTH HAZARD DATA:

PRIMARY ROUTE(S) OF ENTRY:

INHALATION? YES SKIN? YES INGESTION? YES

OSHA REGULATED: NA

CARCINOGENICITY: NTP? NA IARC? NA

ACUTE EFFECT OF OVEREXPOSURE: EXPOSURE TO THE EYES, SKIN, INHALATION AND INGESTION MAY CAUSE DROWSINESS, LETHARGY, SKIN ERUPTIONS, NAUSEA AND VOMITING. LARGE DOSES CAUSE MARKED DEPRESSION (SOMETIMES PRECEDED BY EXCITATION), COMA AND DEATH.

CHRONIC EFFECTS OF EXPOSURE: NIF

TOXICITY DATA: ORAL HUMAN TDLO 4 MG/KG-PSYCHOTROPIC EFFECTS; ORAL CAT LDLO 280 MG/KG; ORAL RABBIT LDLO 275 MG/KG; SUBCUTANEOUS RAT LD50 450 MG/KG; SUBCUTANEOUS MOUSE LD50 630 MG/KG; SUBCUTANEOUS RABBIT LDLO 250 MG/KG; INTRAPERITONEAL RAT LDLO 300 MG/KG; INTRAPERITONEAL MOUSE LD50 500 MG/KG; INTRAPERITONEAL RABBIT LDLO 225 MG/KG; INTRAVENOUS RABBIT LDLO 350 MG/KG; INTRAVENOUS CHICKEN LDLO 225 MG/KG; CYTOGENETIC ANALYSIS MOUSE ORAL 33 G/KG; CYTOGENETIC ANALYSIS HAMSTER FIBROBLAST 2 G/L/48H

MODERATELY TOXIC BY INTRAPERITONEAL AND SUBCUTANEOUS ADMINISTRATION. CAN CAUSE PSYCHOTROPIC EFFECTS IN HUMANS VIA ORAL ADMINISTRATION.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: BARBITAL EFFECTS MAY BE INTENSIFIED BY PRESENCE OF OTHER DRUGS.

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: IN CASE OF CONTACT, FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN.

SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER FOR 15 MINUTES. CALL A PHYSICIAN.

INHALATION: KEEP AIR PASSAGES OPEN; PREVENT ASPIRATION. GIVE ARTIFICIAL RESPIRATION OR OXYGEN. CALL A PHYSICIAN.

INGESTION: IF CONSCIOUS, INDUCE VOMITING BY IPECAC SYRUP OR TWO GLASSES OF WARM WATER OR DILUTE MILK FOLLOWED BY TICKLING THE BACK OF THE THROAT WITH A TONGUE DEPRESSOR. AFTER VOMITING STOPS, GIVE PATIENT ONE OR TWO TABLESPOONFULS OF ACTIVATED CHARCOAL IN A GLASS OF WATER. CALL A PHYSICIAN.

5. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT (METHOD USED): NA

FLAMMABLE LIMITS: LEL NE UEL NE

EXTINGUISHING MEDIA: FOAM, FOG, WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURES: ISOLATE HAZARD AND EVACUATE CONFINED AREAS. STAY UPWIND; AVOID SMOKE AND FUMES. USE WATER SPRAY TO WET CONTAINERS. IF SMOKE AND FUMES CANNOT BE AVOIDED, WEAR A CHEMICAL-PROOF SUIT WITH HOOD AND BREATHING AIR SUPPLY. FIGHT FIRE FROM MAXIMUM DISTANCE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NA

6. REACTIVITY DATA:

STABILITY: UNSTABLE: STABLE: X

INCOMPATIBILITY (MATERIALS TO AVOID): NA

HAZARDOUS DECOMPOSITION OF BY-PRODUCTS: WHEN HEATED TO DECOMPOSITION, TOXIC FUMES SUCH AS NITROGEN OXIDES ARE EMITTED.

HAZARDOUS POLYMERIZATION: MAY OCCUR: WILL NOT OCCUR: X

7. SPILL OR LEAK PROCEDURES:

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: SHOVEL LARGE QUANTITIES OF SPILLED MATERIAL INTO DRUMS. SWEEP UP THE SPILL AREA AND SAVE THE MATERIAL FOR RECOVERY. FLUSH THE SPILL AREA WITH DETERGENT AND WATER.

WASTE DISPOSAL METHODS: OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS.

8. SPECIAL PROTECTION INFORMATION:

RESPIRATORY PROTECTION (SPECIFY TYPE): DUST RESPIRATOR

VENTILATION: LOCAL EXHAUST: X MECHANICAL: OTHER:

PROTECTIVE GLOVES: YES

EYE PROTECTION: YES

OTHER PROTECTIVE EQUIPMENT: NA

9. SPECIAL PRECAUTIONS:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: **AVOID BREATHING DUST. AVOID CONTACT WITH EYE AND SKIN. WASH THOROUGHLY AFTER HANDLING.**

OTHER PRECAUTIONS: **NA**

10. OTHER INFORMATION: **NA**

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DATE PREPARED: 8/23/2002

REVISION: 4

1. IDENTIFICATION:

PRODUCT NAME: **SODIUM AZIDE**
CAS #: **26628-22-8**

MOLECULAR WEIGHT: **65.01**
MOLECULAR FORMULA: **NA-N3**

CHEMICAL FAMILY: **AZIDE**

**AZIDE, SODIUM * AZOTURE DE SODIUM (FRENCH) * AZYDEK SODU (POLISH) *
KAZOE * NATRIUMAZID (GERMAN) * NATRIUMMAZIDE (DUTCH) * NCI-C06462 *
NEMAZYD * NSC 3072 * RCRA WASTE NUMBER P105 * SMITE * SODIUM AZIDE
(ACGIH:DOT) * SODIUM, AZOTURE DE (FRENCH) * SODIUM, AZOTURO DI
(ITALIAN) * U-3886 * UN1687 (DOT) ***

2. HAZARDOUS INGREDIENTS:

CHEMICAL NAME/COMMON NAME CAS #	%	EXPOSURE LIMITS	
		OSHA PEL	ACGIH TLV
SODIUM AZIDE 26628-22-8	100.0	0.1 PPM (HN3) CEILING (SKIN)	0.3 MG/M3 (NAN3) CEILING (SKIN)

3. PHYSICAL DATA:BOILING POINT: **NA** SPECIFIC GRAVITY (H₂O = 1): **1.846**VAPOR PRESSURE (MM HG.): **NA** MELTING POINT: **> 527°F (> 320°C)**
(DECOMPOSES)VAPOR DENSITY (AIR = 1): **NA** SOLUBILITY IN WATER: **SOLUBLE**APPEARANCE AND ODOR: **WHITE, CRYSTALLINE POWDER**

NA = Not Applicable**NE = Not Established****NL = Not Listed****NIF = No Information Found**

4. HEALTH HAZARD DATA:

PRIMARY ROUTE(S) OF ENTRY:

INHALATION? YES SKIN? YES INGESTION? YES

OSHA REGULATED? NA

CARCINOGENICITY: NTP? NA IARC? NA

ACUTE EFFECT OF OVEREXPOSURE:

EYES: IRRITANT.
SKIN: IRRITANT/HIGHLY TOXIC.
INHALATION: IRRITANT/HIGHLY TOXIC
INGESTION: HIGHLY TOXIC

CHRONIC EFFECTS OF EXPOSURE:

MAY ALTER GENETIC MATERIAL

TARGET ORGAN(S):

NERVES, HEART
BRAIN

ADDITIONAL INFORMATION

LABORATORY EXPERIMENTS IN ANIMALS HAVE SHOWN SODIUM AZIDE TO PRODUCE A PROFOUND HYPOTENSIVE EFFECT, DEMYELINATION OF MYELINATED NERVE FIBERS IN THE CENTRAL NERVOUS SYSTEM, TESTICULAR DAMAGE, BLINDNESS, ATTACKS OF RIGIDITY, HEPATIC AND CEREBRAL EFFECTS.

TOXICITY DATA:

RTECS#:VY8050000

ORL-WMN LDLO:786 MG/KG ORL-MUS LD50:27 MG/KG
ORL-MAN LDLO:29 MG/KG IPR-MUS LD50:28 MG/KG
ORL-MAN LDLO:129 MG/KG SCU-MUS LD50:23060 UG/KG
ORL-MAN LDLO:14 MG/KG IVN-MUS LD50:19 MG/KG
ORL-MAN LDLO:143 MG/KG UNR-MUS LD50:27 MG/KG
ORL-RAT LD50:27 MG/KG SKN-RBT LD50:20 MG/KG
SCU-RAT LD50:45100 UG/KG ORL-BWD LD50:23700 UG/KG
ITR-RAT LD50:47500 UG/KG

TARGET ORGAN DATA

BRAIN AND COVERINGS (INCREASED INTRACRANIAL PRESSURE)
PERIPHERAL NERVE AND SENSATION (SPASTIC PARALYSIS WITH/WITHOUT SENSORY SENSE ORGANS AND SPECIAL SENSES (MYDRIASIS)
BEHAVIORAL (GENERAL ANESTHETIC)
BEHAVIORAL (SOMNOLENCE)
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
BEHAVIORAL (CHANGE IN MOTOR ACTIVITY)
BEHAVIORAL (COMA)
BEHAVIORAL (HEADACHE)

4. HEALTH HAZARD DATA: (CONT)

- BEHAVIORAL (IRRITABILITY)
- CARDIAC (ARRYTHMIAS)
- CARDIAC (PULSE RATE DECREASED WITH FALL IN BP)
- CARDIAC (CHANGE IN FORCE OF CONTRACTION)
- CARDIAC (OTHER CHANGES)
- VASCULAR (BP LOWERING NOT CHARACTERIZED IN AUTONOMIC SECTION)
- LUNGS, THORAX OR RESPIRATION (ACUTE PULMONARY EDEMA)
- LUNGS, THORAX OR RESPIRATION (DYSPPNAE)
- LUNGS, THORAX OR RESPIRATION (RESPIRATORY STIMULATION)
- LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)
- GASTROINTESTINAL (HYPERMOTILITY, DIARRHEA)
- KIDNEY, URETER, BLADDER (OTHER CHANGES)

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NA

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER OR NORMAL SALINE OCCASIONALLY LIFTING UPPER AND LOWER LIDS UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

INGESTION: IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN.

5. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT (METHOD USED): NA

FLAMMABLE LIMITS: LEL NA UEL NA

EXTINGUISHING MEDIA DO NOT USE WATER. DRY CHEMICAL POWDER.

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

5. FIRE AND EXPLOSION HAZARD DATA (CONT)

UNUSUAL FIRE AND EXPLOSION HAZARDS: CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS. EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

6. REACTIVITY DATA:

STABILITY: UNSTABLE: STABLE: X

INCOMPATIBILITY (MATERIALS TO AVOID): ACID CHLORIDES; HALOGENATED SOLVENTS; AVOID CONTACT WITH METALS; AVOID CONTACT WITH ACID; EXPLODES WHEN HEATED.

AZIDE REACTS WITH MANY HEAVY METALS SUCH AS LEAD, COPPER, MERCURY, SILVER, GOLD TO FORM EXPLOSIVE COMPOUNDS. COPPER AND LEAD AZIDES ARE MORE SENSITIVE THAN NITROGLYCERINE. AZIDE REACTS WITH METAL HALIDES TO GIVE A RANGE OF METAL AZIDE HALIDES, MANY OF WHICH ARE EXPLOSIVE. INCOMPATIBLE WITH CHROMYL CHLORIDE, HYDRAZINE, BROMINE, CARBON DISULFIDE, DIMETHYL SULFATE, DIBROMOMALONITRILE. AN EXPLOSION OCCURRED WHEN A MIXTURE OF SODIUM AZIDE, METHYLENE CHLORIDE, DIMETHYL SULFOXIDE, AND SULFURIC ACID WERE BEING CONCENTRATED ON A ROTARY EVAPORATOR.

HAZARDOUS DECOMPOSITION OF BY-PRODUCTS: NITROGEN OXIDES

HAZARDOUS POLYMERIZATION: MAY OCCUR: WILL NOT OCCUR: X

7. SPILL OR LEAK PROCEDURES:

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: 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.

WASTE DISPOSAL METHODS: OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS.

8. SPECIAL PROTECTION INFORMATION:

RESPIRATORY PROTECTION (SPECIFY TYPE):

VENTILATION: LOCAL EXHAUST: MECHANICAL: X OTHER:

PROTECTIVE GLOVES: CHEMICAL-RESISTANT GLOVES.

EYE PROTECTION: SPLASH-PROOF OR DUST RESISTANT SAFETY GOGGLES AND FACESHIELD.

OTHER PROTECTIVE EQUIPMENT: SAFETY SHOWER AND EYE BATH

9. SPECIAL PRECAUTIONS:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

OTHER PRECAUTIONS: FORMS HAZARDOUS VAPORS WHEN CONTACTED WITH ACIDS. THRESHOLD PLANNING QUANTITY IS SARA REGULATED.

10. OTHER INFORMATION: EVEN DILUTE SOLUTIONS WHEN EXPOSED TO ACIDS MAY FORM HAZARDOUS VAPORS.

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DATE PREPARED: 5/31/2002
 REVISION: 3

1. IDENTIFICATION:

NAME: THIMEROSAL

CAS #: 54-64-8

MOLECULAR FORMULA: C9H10HG02S

SYNONYMS: ((O-CARBOXYPHENYL) THIO)ETHYLMERCURY SODIUM SALT * ELCIDE
 75 * ELCIDE * ETHYL(2-MERCAPTOBENZOATO-S)MERCURY SODIUM SALT * O-
 (ETHYLMERCURITHIO)BENZOIC ACID SODIUM SALT *
 ETHYLMERCURITHIOSALICYLIC ACID SODIUM SALT *
 ETHYLMERKURITHIOSALICILAN SODNY (CZECH) * ETHYL (SODIUM O-
 MERCAPTOBENZOATO)MERCURY * MERCUROTHIOLATE * MERCURY, ETHYL(2-
 MERCAPTOBENZOATE-S)-, SODIUM SALT * MERFAMIN * MERTHIOLATE *
 MERTHIOLATE SALT * MERTHIOLATE SODIUM * MERTORGAN * MERZONIN *
 MERZONIN SODIUM * MERZONIN, SODIUM SALT * SET * SODIUM ETHYLMERCURIC
 THIOSALICYLATE * SODIUM O-(ETHYLMERCURITHIO)BENZOATE * SODIUM
 ETHYLMERCURITHIOSALCYLATE * SODIUM MERTHIOLATE * THIMEROSAL *
 THIMEROSALATE * THIMEROSOL * THIMERSALATE * THIOMEROSAL * THIOMERSAL
 * THIOMERSALATE *

2. HAZARDOUS INGREDIENTS:

CHEMICAL NAME/COMMON NAME CAS #	%	EXPOSURE LIMITS	
		OSHA PEL	ACGIH TLV
THIMEROSAL 54-64-8	100.0	0.1MG (HG) /M3	0.1MG (HG) /M3 SKIN

NA = Not Applicable
 NL = Not Listed

NE = Not Established
 NIF = No Information Found

3. PHYSICAL DATA:

BOILING POINT: NIF SPECIFIC GRAVITY (H2O = 1): NIF
VAPOR PRESSURE (MM HG.): NIF MELTING POINT: 232°C TO 233°C (DEC)
VAPOR DENSITY (AIR = 1): NA SOLUBILITY IN WATER: SOLUBLE
APPEARANCE AND ODOR: WHITE POWDER

4. HEALTH HAZARD DATA:

PRIMARY ROUTE(S) OF ENTRY:
INHALATION? YES SKIN? YES INGESTION? YES

OSHA REGULATED? NA

CARCINOGENICITY: NTP? NA IARC? NA

ACUTE EFFECT OF OVEREXPOSURE: MAY CAUSE NERVOUS SYSTEM DISTURBANCES.

EYES: CAUSES EYE IRRITATION

SKIN: MAY BE FATAL IF ABSORBED THROUGH THE SKIN.
CAUSES SKIN IRRITATION.

INHALATION: MAY BE FATAL IF INHALED. MATERIAL IS IRRITATING
TO UPPER RESPIRATORY TRACT.

INGESTION: MAY BE FATAL IF SWALLOWED. MATERIAL IS
IRRITATING TO MUCOUS MEMBRANES.

CHRONIC EFFECTS OF EXPOSURE: LABORATORY EXPERIMENTS HAVE SHOWN
MUTAGENIC EFFECTS, TARGET ORGANS: KIDNEYS, CENTRAL NERVOUS SYSTEM.

TOXICITY DATA:

RTECS NO.: OV8400000

Table with 2 columns: Test Name and Value. Rows include MERCURY, ((O-CARBOXYPHENYL) THIO) ETHYL-, SODIUM SALT and various LD50 values for different species and routes.

IRRITATION DATA

EYE-RBT 8 UG MLD AJOPAA 78,98,74

4. HEALTH HAZARD DATA (CONT):

TARGET ORGAN DATA

- BEHAVIORAL (ATAXIA)
- 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.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NA

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN IMMEDIATELY.

SKIN CONTACT: IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

INHALATION: IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN IMMEDIATELY.

INGESTION: IF SWALLOWED, WASH OUT MOUTH WITH WATER, PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IMMEDIATELY.

5. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT (METHOD USED): > 482°F (> 250°C)

FLAMMABLE LIMITS: NA LEL NA UEL NA

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

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

5. FIRE AND EXPLOSION HAZARD DATA (CONT):

UNUSUAL FIRE AND EXPLOSION HAZARDS: EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

6. REACTIVITY DATA:

STABILITY: UNSTABLE: STABLE: X

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZING AGENTS, STRONG ACIDS, STRONG BASES. MAY DISCOLOR ON EXPOSURE TO LIGHT.

HAZARDOUS DECOMPOSITION OF BY-PRODUCTS: TOXIC FUMES OF CARBON MONOXIDE, CARBON DIOXIDE, SULFUR OXIDES, MERCURY/MERCURY OXIDES.

HAZARDOUS POLYMERIZATION: MAY OCCUR: WILL NOT OCCUR: X

7. SPILL OR LEAK PROCEDURES:

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: 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 COMPLETED.

WASTE DISPOSAL METHODS: OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS.

8. SPECIAL PROTECTION INFORMATION:

RESPIRATORY PROTECTION (SPECIFY TYPE): APPROPRIATE NIOSH/MSHA - APPROVED

VENTILATION: LOCAL EXHAUST: MECHANICAL: OTHER: CHEMICAL FUME HOOD

PROTECTIVE GLOVES: CHEMICAL RESISTANT

EYE PROTECTION: SAFETY GOGGLES

OTHER PROTECTIVE EQUIPMENT: OTHER PROTECTIVE CLOTHING, SAFETY SHOWER AND EYE BATH.

9. SPECIAL PRECAUTIONS:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: DO NOT BREATHE DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING, AVOID PROLONGED OR REPEATED EXPOSURE. WASH THOROUGHLY AFTER HANDLING. KEEP TIGHTLY CLOSED. LIGHT SENSITIVE. STORE IN A COOL DRY PLACE.

9. SPECIAL PRECAUTIONS (CONT):

OTHER PRECAUTIONS: WASH CONTAMINATED CLOTHING BEFORE USE.

10. OTHER INFORMATION:

POSSIBLE ALLERGIC REACTION TO DUST IF INHALED, INGESTED OR IN CONTACT WITH SKIN. HYPERSENSITIVITY REACTIONS MANIFESTED BY ERYTHEMA, PAPULAR OR VESICULAR ERUPTIONS OCCUR OCCASIONALLY. ALLERGIC CONJUNCTIVITIS HAS BEEN REPORTED. THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

The information herein is given in good faith but no warranty, expressed or implied, is made.