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MATERIAL SAFETY DATA SHEET SECTION 1. - - - - - - CHEMICAL IDENTIFICATION- - - - - - - -CATALOG #: 39177 GUANINE, 99% NAME: (BIOSYNTH) SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -CAS #: 73-40-5 MF: C5H5N5O EC NO: 200-799-8 SYNONYMS 2-AMINOHYPOXANTHINE * C.I. 75170 * C.I. NATURAL WHITE 1 * DEW PEARL * GUANIN * GUANINE ENOL * MEARLMAID * NATURAL PEARL ESSENCE * NATURAL WHITE 1 * NATURON * PEARL ESSENCE * 6H-PURIN-6-ONE, 2-AMINO-1,7-DIHYDRO- (9CI) * STELLA POLARIS * SECTION 3. - - - - - - HAZARDS IDENTIFICATION - - - - - -LABEL PRECAUTIONARY STATEMENTS TRRTTANT 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- - - - - - - - -IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER. IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. 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. 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 - - - - -SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED. WASH THOROUGHLY AFTER HANDLING. DO NOT BREATHE DUST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

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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: > 300 C
SECTION 10. - - - - - - - - STABILITY AND REACTIVITY - - -
 STABILITY
   STABLE.
 INCOMPATIBILITIES
   STRONG OXIDIZING AGENTS
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
   CARBON MONOXIDE, CARBON DIOXIDE
   NITROGEN OXIDES
 HAZARDOUS POLYMERIZATION
   WILL NOT OCCUR.
SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - -
 ACUTE EFFECTS
    CAUSES SKIN IRRITATION.
   MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
   CAUSES EYE IRRITATION.
   MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER
   RESPIRATORY TRACT.
   MAY BE HARMFUL IF INHALED.
   MAY BE HARMFUL IF SWALLOWED.
    TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
   TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
 RTECS #: MF8260000
   GUANINE
 TARGET ORGAN DATA
    SKIN AND APPENDAGES (TUMORS)
    TUMORIGENIC EFFECTS (OVARIAN TUMORS)
   TUMORIGENIC (EQUIVOCAL TUMORIGENIC AGENT BY RTECS CRITERIA)
    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
   IRRITANT
   R 36/37/38
   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.
 REVIEWS, STANDARDS, AND REGULATIONS
   OEL=MAK
   NOES 1983: HZD X2576; NIS 3; TNF 1778; NOS 3; TNE 4133; TFE 3339
   EPA GENETOX PROGRAM 1988, INCONCLUSIVE: E COLI POLA WITHOUT S9
   EPA GENETOX PROGRAM 1988, INCONCLUSIVE: D MELANOGASTER SEX-LINKED
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LETHAL

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

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

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