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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 #: S9663  
NAME: SODIUM ARSENATE DIBASIC HEPTAHYDRATE  
ACS REAGENT

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

CAS #: 10048-95-0  
MF: HASNA204

SYNONYMS

DIBASIC SODIUM ARSENATE HEPTAHYDRATE \* DISODIUM ARSENATE,  
HEPTAHYDRATE \* SODIUM ACID ARSENATE, HEPTAHYDRATE \* SODIUM ARSENATE,  
DIBASIC, HEPTAHYDRATE \* SODIUM ARSENATE HEPTAHYDRATE \* SODIUM  
ARSENATE HEPTAHYDRATE \*

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

LABEL PRECAUTIONARY STATEMENTS

TOXIC  
DANGEROUS FOR THE ENVIRONMENT  
MAY CAUSE CANCER.  
TOXIC BY INHALATION AND IF SWALLOWED.  
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.  
VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE  
EFFECTS IN THE AQUATIC ENVIRONMENT.  
DANGER: CONTAINS INORGANIC ARSENIC. CANCER HAZARD. HARMFUL IF  
INHALED OR SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION OR  
RESPIRATORY PROTECTION.

TARGET ORGAN(S):

SKIN  
LIVER, KIDNEYS  
CAUSES IRRITATION.  
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE  
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).  
THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF AS  
HAZARDOUS WASTE.  
AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/  
SAFETY DATA SHEETS.

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 BREATHING BECOMES DIFFICULT,  
CALL A PHYSICIAN.  
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS  
AMOUNTS OF WATER.  
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

NONCOMBUSTIBLE.  
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

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 SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.  
 WEAR DISPOSABLE COVERALLS AND DISCARD THEM AFTER USE.  
 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- - - - -  
 USE ONLY IN A CHEMICAL FUME HOOD.  
 SAFETY SHOWER AND EYE BATH.  
 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 IN NONVENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV.  
 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  
 CRYSTALLINE  
 SOLID.  
 PHYSICAL PROPERTIES  
 MELTING POINT: 180 C  
 SPECIFIC GRAVITY: 1.88  
 PH: 8.5 - 9.0  
 SWISS POISON CLASS: 1

SECTION 10. - - - - - -STABILITY AND REACTIVITY - - - - -  
 STABILITY  
 STABLE.  
 CONDITIONS TO AVOID  
 ABSORBS CO2 FROM AIR.  
 INCOMPATIBILITIES  
 STRONG OXIDIZING AGENTS  
 STRONG ACIDS  
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
 ARSENIC 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.  
 TOXIC IF INHALED.  
 MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.  
 TOXIC IF SWALLOWED.  
 CAUSES DERMATITIS.  
 EXPOSURE TO ARSENIC COMPOUNDS CAN CAUSE BURNING AND DRYNESS OF THE ORAL AND NASAL CAVITIES, MUSCLE SPASMS, IRRITATION OF THE GASTROINTESTINAL TRACT, NAUSEA, VOMITING AND DIARRHEA WHICH CAN PROGRESS TO SHOCK AND DEATH.

CHRONIC EFFECTS  
 THIS IS OR CONTAINS A COMPONENT THAT HAS BEEN REPORTED TO BE CARCINOGENIC BASED ON ITS IARC, OSHA, ACGIH, NTP OR EPA CLASSIFICATION.  
 TARGET ORGAN(S):  
 SKIN

LIVER, KIDNEYS  
G.I. SYSTEM  
BLADDER  
LUNGS

LABORATORY EXPERIMENTS HAVE SHOWN MUTAGENIC EFFECTS.  
RTECS #: CG0900000

ARSENIC ACID, DISODIUM SALT, HEPTAHYDRATE

TOXICITY DATA

IMS-MUS LD50:87360 UG/KG

EXMDA4 (440),312,1978

TARGET ORGAN DATA

BEHAVIORAL (SOMNOLENCE)  
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)  
BEHAVIORAL (ATAXIA)  
EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)  
EFFECTS ON FERTILITY (LITTER SIZE)  
EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)  
EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)  
SPECIFIC DEVELOPMENTAL ABNORMALITIES (CENTRAL NERVOUS SYSTEM)  
SPECIFIC DEVELOPMENTAL ABNORMALITIES (EYE, EAR)  
SPECIFIC DEVELOPMENTAL ABNORMALITIES (CRANIOFACIAL)  
SPECIFIC DEVELOPMENTAL ABNORMALITIES (BODY WALL)  
SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM)  
SPECIFIC DEVELOPMENTAL ABNORMALITIES (UROGENITAL SYSTEM)  
SPECIFIC DEVELOPMENTAL ABNORMALITIES (OTHER DEVELOPMENTAL ABNORMALITIES)  
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.

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: 033-005-00-1

TOXIC

DANGEROUS FOR THE ENVIRONMENT

R 45

MAY CAUSE CANCER.

R 50/53

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EFFECTS IN THE AQUATIC ENVIRONMENT.

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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 0.01 MG(AS)/M3

DTLVS\* TLV/BEI,1997

ACGIH TLV-CONFIRMED HUMAN CARCINOGEN

DTLVS\* TLV/BEI,1999

MSHA STANDARD-AIR:TWA 0.5 MG(AS)/M3

DTLVS\* 3,16,1971

OSHA-CANCER HAZARD

CFRGBR 29,1910.1018,1987

OEL-ARAB REPUBLIC OF EGYPT: TWA 0.2 MG(AS)/M3, JAN1993

OEL-AUSTRALIA: TWA 0.05 MG(AS)/M3, CARCINOGEN, JAN1993

OEL-BELGIUM: TWA 0.2 MG(AS)/M3, JAN1993

OEL-DENMARK: TWA 0.05 MG(AS)/M3, JAN1999  
OEL-FINLAND: CARCINOGEN, JAN1993  
OEL-FRANCE: VME 0.2 MG(AS)/M3, JAN1993  
OEL-HUNGARY: STEL 0.5 MG(AS)/M3, CARCINOGEN, JAN1993  
OEL-INDIA: TWA 0.2 MG(AS)/M3, JAN1993  
OEL-NORWAY: TWA 0.01 MG(AS)/M3, JAN1999  
OEL-THE PHILIPPINES: TWA 0.5 MG(AS)/M3, JAN1993  
OEL-POLAND: MAC(TWA) 0.3 MG(AS)/M3, JAN1999  
OEL-SWEDEN: NGV 0.03 MG(AS)/M3, CARCINOGEN, JAN1999  
OEL-SWITZERLAND: MAK-W 0.1 MG(AS)/M3, CARCINOGEN, JAN1999  
OEL-THAILAND: TWA 0.5 MG(AS)/M3, JAN1993  
OEL-TURKEY: TWA 0.5 MG(AS)/M3, JAN1993  
OEL-UNITED KINGDOM: TWA 0.1 MG(AS)/M3, CARCINOGEN, SEP2000  
OEL IN ARGENTINA, BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV;  
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV  
NIOSH REL TO ARSENIC, INORGANIC-AIR:CA CL 0.002 MG(AS)/M3/15M  
NIOSH\* DHHS #92-100,1992  
NIOSH CURRENT INTELLIGENCE BULLETIN 14, 1976  
NTP 9TH REPORT ON CARCINOGENS, 2000:KNOWN TO BE HUMAN CARCINOGEN

U.S. INFORMATION

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

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