

HIGH-PURITY STANDARDS

-- ARSENIC

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MSDS Safety Information  
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FSC: 6810  
MSDS Date: 03/01/1995  
MSDS Num: BZRFZ  
LIIN: 00N065017  
Product ID: ARSENIC  
MFN: 01  
Responsible Party  
Cage: OYZE5  
Name: HIGH-PURITY STANDARDS  
Box: 30188  
City: CHARLESTON SC 29417  
Info Phone Number: 803-556-3411  
Emergency Phone Number: 803-556-3411  
Published: Y

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Contractor Summary  
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Cage: OYZE5  
Name: HIGH-PURITY STANDARDS INC  
Address: 2040 SAVAGE RD  
Box: 30180  
City: CHARLESTON SC 29417  
Phone: 803-556-3411

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Ingredients  
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Cas: 7440-38-2  
RTECS #: CG0525000  
Name: ARSENIC; (AS) (SARA 313) (CERCLA)  
% Wt: 0.1  
OSHA PEL: SEE 1910.1018  
ACGIH TLV: 0.01 MG/M3, A1  
EPA Rpt Qty: 1 LB  
DOT Rpt Qty: 1 LB

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Cas: 7697-37-2  
RTECS #: QU5775000  
Name: NITRIC ACID; (HNO\*3) (SARA 302/313) (CERCLA)  
% Wt: 2  
OSHA PEL: 2 PPM  
ACGIH TLV: 2 PPM/4 STEL  
EPA Rpt Qty: 1000 LBS  
DOT Rpt Qty: 1000 LBS

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Name: SUP DAT: SUFFICIENT CONC CAUSES CYANOSIS. ONSET OF THIS CNDTN MAY BE  
DELAYED 2-4 HRS/EVEN LONGER. ARSENIC & ITS

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Name: ING 3: CMPDS CAUSE SYMP CHARACT BY CONSTRICTION OF THROAT FOLLOWED BY  
DYSPHAGIA, EPIGASTRIC PAIN, VOMIT & WATERY

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Name: ING 4: DIARR. BLOOD MAY APPEAR IN VOMITUS & STOOL. IF AMT INGESTED IS  
SUFFICIENTLY HIGH, SHOCK MAY DEVELOP DUE

Name: ING 5: TO SEV FLUID LOSS. CONTINUED POIS BY INGEST CAN CAUSE WT LOSS,  
NAUS, DIARR ALTERNATING W/CONSTIPATION,

Name: ING 6: PIGMENTATION & ERUPTION OF SKIN, LOSS OF HAIR, &  
PERIPHERAL NEURITIS. POLYNEURITIS MAY ALSO RESULT.

Name: ING 7: HORIZONTAL WHITE LINES (STRIATIONS) ON FINGERNAILS & TOENAILS  
ARE COMMONLY SEEN W/CHRONIC EXPOS & ARE

Name: ING 8: CONSIDERED TO BE DIAGNOSTIC ACCOMPANIMENT OF ARSENICAL  
POLYNEURITIS. IF ARSENIC POIS OCCURS DUE TO

Name: ING 9: INHAL, COUGH, CHEST PAIN, DYSPNEA, HDCH & EXTREME GEN WEAK  
PRECEDE GI SYMP. ACUTE POIS DUE TO INHAL IS

Name: ING 10: RARE IN INDUS, BUT CHRONIC BRTHG OF INORG ARSENIC CMPDS IS THE  
MOST COMMON CAUSE OF HAZ IN WORK PLACE.

Name: ING 11: THIS CNDTN IS DIVIDED INTO 3 PHASES BASED ON DISTRESS SIGNS &  
SYMP: PHASE I: VICTIM DEVELOPS WEAK, LOSS

Name: ING 12: OF APPETITE, NAUS, OCCAS VOMIT, STOM DISCOMFORT & SOME DIARR.  
PHASE II: CONJUNC & CATARRHAL STATE OF

Name: ING 13: MUC MEMB OF NOSE, LARYNX & RESP PASSAGES DEVELOPS. CORYZA,  
HOARSENESS, & MILD TRACHEOBRONCHITIS MAY

Name: ING 14: OCCUR. PERFORATION OF NASAL SEPTUM IS COMMON, & PROBABLY THE  
MOST TYPICAL LESION OF UPPER RESP TRACT IN

Name: ING 15: OCCUP EXPOS TO ARSENIC DUST. SKIN LESIONS, ECZEMATOID &  
ALLERGIC IN TYPE, ARE COMMON. PHASE III: SYMPS

Name: ING 16: OF PERIPHERAL NEURITIS, INITIALLY IN HANDS & FEET, WHICH IS  
ESSENTIALLY SENSORY, WILL DEVELOP. IN MORE

Name: ING 17: SEV CASES, MOTOR PARAL WILL OCCUR. FIRST MUSCLES AFFECTED BY  
THIS  
ARE USUALLY TOE EXTENSORS & PERONEI.

Name: ING 18: IN ONLY MOST SEV CASES WILL PARAL OF FLEXOR MUSCLES OF FEET/OF  
EXTENSOR MUSCLES OF HANDS OCCUR.

Name: ING 19: ARSENIC IS ALSO CONSIDERED TO BE A MUTAGEN.

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Health Hazards Data  
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LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: NO

Carcinogenicity Inds - NTP: YES

IARC: YES

OSHA: YES

Effects of Exposure: ACUTE: ARSENIC & ITS CMPDS CAN BE FATAL IF INHALED,  
SWALLOWED/ABSORBED THRU SKIN. PRLNG CONT RSLTS IN LOC HYPEREMIA & LATER  
VESICULAR/PUSTULAR ERUPTION. MOIST MUC MEMB ARE MOST SENSITIVE TO IRRITANT

ACTION. CONJUNCTIVA, MOIST & MACERATED AREAS OF SKIN, EYELIDS, ANGLES OF EARS, NOSE, MOUTH & RESP (EFTS OF OVEREXP)

Explanation Of Carcinogenicity: ARSENIC: IARC MONO, SUPP, VOL 7, PG 100, 1987:GROUP 1. NTP 7TH ANNUAL REPORT ON CARCINS, 1994: KNOWN TO BE (SUP DAT)

Signs And Symptoms Of Overexposure: HLTH HAZ: MUCOSA ARE ALSO VULNERABLE TO IRRITANT EFTS. WRISTS ARE COMMON SITE OF DERM. ARSENIC IS ALSO CAPABLE OF PRODUCING KERATOSES, ESPECIALLY TO PALMS & SOLES. THERE IS SUFFICIENT EVIDENCE THAT SUPPORTS FACT THAT SKIN CANCER IN HUMANS IS ASSOC W/EXPOS TO INORG ARSENIC CMPDS IN DRUGS, DRINKING WATER & IN (SUP DAT)

Medical Cond Aggravated By Exposure: BURNS, DERMATITIS, LARYNGEAL SPASM, PULMONARY EDEMA CAN BE AGGRAVATED BY HNO\*3.

First Aid: CALL MD. INGESTION: DO NOT INDUCE VOMITING. IF CONSCIOUS, GIVE WATER, MILK. EYES/SKIN: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. INHALATION: REMOVE TO FRESH AIR. SUPPORT BREATHING (GIVE OXYGEN OR ARTIFICIAL RESPIRATION) (FP N).

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Handling and Disposal  
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Spill Release Procedures: REMOVE SOURCE OF IGNITION IF HYDROGEN IS A HAZARD. PROVIDE OPTIMUM VENTILATION. FLUSH TO HOLDING AREA FOR NEUTRALIZATION.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS FOR ACID WASTE. EPA HAZARDOUS WASTE #: P010.

Handling And Storage Precautions: KEEP CONTAINER TIGHTLY CLOSED.

Other Precautions: NONE SPECIFIED BY MANUFACTURER.  
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Fire and Explosion Hazard Information  
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Extinguishing Media: USE MEDIA SUITABLE FOR SURROUNDING FIRE (FP N).

Fire Fighting Procedures: WEAR NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT (FP N).

Unusual Fire/Explosion Hazard: TOXIC GASES PRODUCED: NO, NO\*2.  
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Control Measures  
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Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRATOR.

Ventilation: LOCAL EXHAUST.

Protective Gloves: IMPERVIOUS GLOVES (FP N).

Eye Protection: ANSI APPRVD CHEM WORKERS GOGGS (FP N).

Other Protective Equipment: LAB COAT/APRON: VENT HOOD. EMERGENCY EYEWASH & DELUGE SHOWER MEETING ANSI DESIGN CRITERIA (FP N).

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health: CARCIN EXPLAN: CARCIN. OSHA REGULATED: CFR 29 1910.1018. EFTS OF OVEREXP: OCCUP ENVIRON. THERE ARE ALSO CASE REPORTS THAT SUGGEST THAT THERE IS AN ASSOC BETWEEN EXPOS TO ARSENIC CMPDS & BLOOD DYSCRASIAS & LIVER TUMORS. IT MAY CAUSE IRRIT & ABSORPTION INTO BODY WHICH LEADS TO FORMATION OF METHEMOGLOBIN WHICH IN  
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Physical/Chemical Properties  
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B.P. Text: 212F,100C

Spec Gravity: 1 (H\*20=1)

Solubility in Water: COMPLETE

Appearance and Odor: CLEAR, COLORLESS ODORLESS SOLUTION  
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Reactivity Data  
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Stability Indicator: YES  
Stability Condition To Avoid: METALS, HYDROXIDES, CARBONATES, CYANIDES.  
Materials To Avoid: STRONG REDUCING AGENTS.  
Hazardous Decomposition Products: NO, NO\*2.  
Hazardous Polymerization Indicator: NO  
Conditions To Avoid Polymerization: NOT RELEVANT.

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Toxicological Information  
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Ecological Information  
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MSDS Transport Information  
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Regulatory Information  
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Other Information  
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=====  
HAZCOM Label  
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Product ID: ARSENIC  
Cage: 0YZE5  
Company Name: HIGH-PURITY STANDARDS INC  
Street: 2040 SAVAGE RD  
PO Box: 30180  
City: CHARLESTON SC  
Zipcode: 29417  
Health Emergency Phone: 803-556-3411  
Label Required IND: Y  
Date Of Label Review: 10/16/1995  
Status Code: C  
Label Date: 10/16/1995  
Origination Code: G  
Chronic Hazard IND: Y  
Eye Protection IND: YES  
Skin Protection IND: YES  
Signal Word: DANGER  
Respiratory Protection IND: YES  
Health Hazard: Severe  
Contact Hazard: Severe  
Fire Hazard: None  
Reactivity Hazard: None

Hazard And Precautions: POISON. ACUTE: ARSENIC & ITS COMPOUNDS CAN BE FATAL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN. PROLONGED CONTACT RESULTS IN LOC HYPEREMIA AND LATER VESICULAR OR PUSTULAR ERUPTION. MOIST MUCOUS MEMBRANES ARE MOST SENSITIVE TO IRRITANT ACTION. CONJUNCTIVA, MOIST AND MACERATED AREAS OF SKIN, EYELIDS, ANGLES OF EARS, NOSE, MOUTH & RESP MUCOSA ARE ALSO VULNERABLE TO THE IRRITANT EFFECTS. DERMATITIS MAY OCCUR ON WRISTS. CHRONIC: CANCER HAZARD. ARSENIC IS LISTED AS A HUMAN SKIN AND LIVER CARCINGEN(FP N).

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