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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 #: P8256

NAME: POTASSIUM IODIDE CRYSTALLINE

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

CAS #: 7681-11-0

MF: IK

EC NO: 231-659-4

SYNONYMS

K1-N * KNOLLIDE * POTIDE *

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

LABEL PRECAUTIONARY STATEMENTS

TOXIC

MAY CAUSE HARM TO THE UNBORN CHILD.

MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.

IRRITATING TO EYES AND SKIN.

TARGET ORGAN(S):

THYROID

BLOOD

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE

IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF

WATER AND SEEK MEDICAL ADVICE.

WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE

PROTECTION.

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

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CALL A PHYSICIAN IMMEDIATELY.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL

RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

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

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.

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: 681 C

VAPOR PRESSURE: 1 MMHG

SOLUBILITY:

WATER -Z26130

SPECIFIC GRAVITY: 3,13

PH: 6,0 - 9,0

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

STABILITY

STABLE.

CONDITIONS TO AVOID

MAY DECOMPOSE ON EXPOSURE TO LIGHT.

MAY DECOMPOSE ON EXPOSURE TO AIR AND MOISTURE.

INCOMPATIBILITIES

TIN

STRONG REDUCING AGENTS

NICKEL

STRONG ACIDS

AND THEIR ALLOYS.

STEEL

ALUMINUM

ALKALI METALS

BRASS

MAGNESIUM

ZINC

CADMIUM

COPPER

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

HYDROGEN IODIDE

POTASSIUM OXIDES

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

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

ACUTE EFFECTS

PROLONGED EXPOSURE TO IODIDES MAY PRODUCE IODISM IN SENSITIVE INDIVIDUALS. SYMPTOMS OF EXPOSURE INCLUDE: SKIN RASH, RUNNING NOSE, HEADACHE AND IRRITATION OF THE MUCOUS MEMBRANES. FOR SEVERE CASES THE SKIN MAY SHOW PIMPLES, BOILS, HIVES, BLISTERS AND BLACK AND BLUE SPOTS.

IODIDES ARE READILY DIFFUSED ACROSS THE PLACENTA. NEONATAL DEATHS FROM RESPIRATORY DISTRESS SECONDARY TO GOITER HAVE BEEN REPORTED.

IODIDES HAVE BEEN KNOWN TO CAUSE DRUG-INDUCED FEVERS, WHICH ARE USUALLY OF SHORT DURATION.

CAUSES SKIN IRRITATION.

MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

CAUSES EYE IRRITATION.

MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

MAY BE HARMFUL IF INHALED.

MAY BE HARMFUL IF SWALLOWED.

MAY CAUSE ALLERGIC REACTION.

CHRONIC EFFECTS

MAY CAUSE CONGENITAL MALFORMATION IN THE FETUS.

TARGET ORGAN(S):

THYROID

BLOOD

BONE MARROW

RTECS #: TT2975000

POTASSIUM IODIDE

TARGET ORGAN DATA

BEHAVIORAL (SOMNOLENCE)

BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)

BEHAVIORAL (EXCITEMENT)

BEHAVIORAL (MUSCLE WEAKNESS)

LUNGS, THORAX OR RESPIRATION (DYSPPNAE)

LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)

MATERNAL EFFECTS (PARTURITION)

EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)

EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)

EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)

EFFECTS ON NEWBORN (VIABILITY INDEX)

EFFECTS ON NEWBORN (GROWTH STATISTICS)

EFFECTS ON NEWBORN (BEHAVIORAL)

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

TOXIC

R 61

MAY CAUSE HARM TO THE UNBORN CHILD.

R 42/43

MAY CAUSE SENSITIZATION BY INHALATION AND SKIN CONTACT.

R 36/38

IRRITATING TO EYES AND SKIN.

S 45

IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).

S 26

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.

S 36/37/39

WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.

TLV AND SOURCE

FOR IODINE:

ACGIH TLV-CL: 0.1 PPM.

OSHA PEL-CL: 0.1 PPM (1 MG/M3).

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION

FEREAC 54,7740,1989

NOHS 1974: HZD 81683; NIS 60; TNF 5350; NOS 38; TNE 45136

NOES 1983: HZD 81683; NIS 95; TNF 8947; NOS 86; TNE 243989; TFE 149229

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, OCTOBER 2000

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

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO

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