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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 #: 454044
 NAME: NINHYDRIN, 97%

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

CAS #: 485-47-2
 MF: C9H6O4
 EC NO: 207-618-1

SYNONYMS

2,2-DIHYDROXY-1,3-INDANDIONE * 2,2-DIHYDROXY-1H-INDENE-1,3(2H)-DIONE *
 1,2,3-INDANTRIONE, 2-HYDRATE * 1,2,3-INDANTRIONE MONOHYDRATE *
 NINHYDRIN * NINHYDRIN HYDRATE * TRIKETOHYDRINDENE HYDRATE *

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

LABEL PRECAUTIONARY STATEMENTS

HARMFUL
 HARMFUL IF SWALLOWED.
 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
 RUBEFACIENT.
 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
 WATER AND SEEK MEDICAL ADVICE.
 AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER.
 WEAR SUITABLE PROTECTIVE CLOTHING.
 LIGHT SENSITIVE

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 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

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.
 EVACUATE AREA.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -

REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -

SAFETY SHOWER AND EYE BATH.
 MECHANICAL EXHAUST REQUIRED.

DO NOT BREATHE DUST.
 AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
 AVOID PROLONGED OR REPEATED EXPOSURE.
 NIOSH/MSHA-APPROVED RESPIRATOR.
 COMPATIBLE CHEMICAL-RESISTANT GLOVES.
 CHEMICAL SAFETY GOGGLES.
 WASH THOROUGHLY AFTER HANDLING.
 KEEP TIGHTLY CLOSED.
 STORE IN A COOL DRY PLACE.
 STORE UNDER ARGON.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

PHYSICAL PROPERTIES

MELTING POINT: 250 C (DEC)

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

STABILITY

STABLE.

CONDITIONS TO AVOID

MAY DISCOLOR ON EXPOSURE TO LIGHT.

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

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

ACUTE EFFECTS

CAUSES SKIN IRRITATION.

THIS MATERIAL IS A RUBEFACIENT. SKIN CONTACT WILL RESULT IN A REDDING OF THE SITE WITH POSSIBLE INFLAMMATION.

MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.

CAUSES EYE IRRITATION.

MAY BE HARMFUL IF INHALED.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

HARMFUL IF SWALLOWED.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

LD

RTECS #: NK5425000

1,3-INDANDIONE, 2,2-DIHYDROXY-

TOXICITY DATA

IPR-MUS LD50:78 MG/KG

CRSBAW 151,719,1957

TARGET ORGAN DATA

BEHAVIORAL (SOMNOLENCE)

VASCULAR (REGIONAL OR GENERAL ARTERIOLAR OR VENOUS DILATION)

LUNGS, THORAX OR RESPIRATION (DYSPPNAE)

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 ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - REGULATORY INFORMATION - - - - -

EUROPEAN INFORMATION

HARMFUL

R 22

HARMFUL IF SWALLOWED.

R 36/37/38

IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

S 26

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

S 28

AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER.

S 36

WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

NOHS 1974: HZD A1175; NIS 1; TNF 33; NOS 2; TNE 594

NOES 1983: HZD A1175; NIS 4; TNF 476; NOS 9; TNE 5565; TFE 4002

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

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

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