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SIGMA-ALDRICH

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DATE 10/24/96
CUST#: 2-055-60420
PO#: 1BIO099157

NV 89557

M A T E R I A L S A F E T Y D A T A S H E E T PAGE 1

SECTION 1. - - - - - CHEMICAL IDENTIFICATION - - - - -

CATALOG #: N3132
NAME: ALPHA-NAPHTHYLAMINE ISOPAC

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

CAS #: 134-32-7
MF: C10H9N
EC NO: 205-138-7

SYNONYMS

ALFANAFTILAMINA (ITALIAN) * ALFA-NAFTYLOAMINA (POLISH) * 1-AMINONAFTALEN (CZECH) * 1-AMINONAPHTHALENE * C.I. AZOIC DIAZO COMPONENT 114 * FAST GARNET B BASE * FAST GARNET BASE B * ALPHA-NAFTALAMIN (CZECH) * 1-NAFTILAMINA (SPANISH) * ALPHA-NAFTYLAMIN (CZECH) * 1-NAFTYLAMIN (CZECH) * 1-NAFTYLAMINE (DUTCH) * NAPHTHALIDAM * NAPHTHALIDINE * 1-NAPHTHYLAMIN (GERMAN) * ALPHA-NAPHTHYLAMINE (DOT: OSHA) * RCRA WASTE NUMBER U167 * UN2077 (DOT) *

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

LABEL PRECAUTIONARY STATEMENTS

HIGHLY TOXIC (USA)
TOXIC (EU)
MAY CAUSE HERITABLE GENETIC DAMAGE.
TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
DANGER OF VERY SERIOUS IRREVERSIBLE EFFECTS.
CANCER SUSPECT AGENT.
UNPLEASANT ODOR.
TARGET ORGAN(S):
BLADDER
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.
KEEP CONTAINER TIGHTLY CLOSED IN A COOL WELL-VENTILATED PLACE.

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

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN IMMEDIATELY.
DISCARD CONTAMINATED CLOTHING AND SHOES.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

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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 P A G E 2

CATALOG #: N3132
NAME: ALPHA-NAPHTHYLAMINE ISOPAC

EXTINGUISHING MEDIA
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- - - - -

EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
WEAR DISPOSABLE COVERALLS AND DISCARD THEM AFTER USE.
COVER WITH DRY LIME OR SODA ASH, PICK UP, KEEP IN A CLOSED CONTAINER 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- - - - -

USE ONLY IN A CHEMICAL FUME HOOD.
FOR PROTECTION AND HANDLING REQUIREMENTS CONSULT CFR TITLE 29 PART 1910.
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
AVOID ALL CONTACT.
DO NOT BREATHE DUST.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
CARCINOGEN-OSHA DEFINED
POISON
MUTAGEN.
KEEP TIGHTLY CLOSED.
AIR AND LIGHT SENSITIVE
UNPLEASANT ODOR.
STORE IN A COOL DRY PLACE.

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

APPEARANCE AND ODOR
LIGHT-TAN TO DARK PURPLE POWDER

PHYSICAL PROPERTIES
BOILING POINT: 301 C

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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 P A G E 3

CATALOG #: N3132
NAME: ALPHA-NAPHTHYLAMINE ISOPAC
MELTING POINT: 48 C TO 50 C
FLASHPOINT: >230
109C
SPECIFIC GRAVITY: 1.114

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

INCOMPATIBILITIES
ACIDS
ACID ANHYDRIDES
OXIDIZING AGENTS
LIGHT SENSITIVE
AIR SENSITIVE

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
CARBON MONOXIDE, CARBON DIOXIDE
NITROGEN OXIDES

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

ACUTE EFFECTS
MAY BE FATAL IF INHALED, SWALLOWED, OR ABSORBED THROUGH SKIN.
OSHA-REGULATED CARCINOGEN. SEE CFR TITLE 29 PART 1910.
MAY CAUSE IRRITATION.
ABSORPTION INTO THE BODY LEADS TO THE FORMATION OF METHEMOGLOBIN WHICH IN SUFFICIENT CONCENTRATION CAUSES CYANOSIS. ONSET MAY BE DELAYED 2 TO 4 HOURS OR LONGER.

CHRONIC EFFECTS
CARCINOGEN.
MAY ALTER GENETIC MATERIAL.
TARGET ORGAN(S):
BLADDER

RTECS #: OM1400000
1-NAPHTHYLAMINE

TOXICITY DATA
IPR-MUS LD50:96 MG/KG PMRSDJ 1,682,81

TARGET ORGAN DATA
BEHAVIORAL (TREMOR)
BEHAVIORAL (MUSCLE WEAKNESS)
BLOOD (LEUKEMIA)
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.

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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

EC INDEX NO: 612-020-00-2
TOXIC
R 22
HARMFUL IF SWALLOWED.
S 24
AVOID CONTACT WITH SKIN.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK
IARC CANCER REVIEW:ANIMAL INADEQUATE EVIDENCE IMEMDT 4,87,74
IARC CANCER REVIEW:HUMAN INADEQUATE EVIDENCE IMEMDT 4,87,74
IARC CANCER REVIEW:GROUP 3 IMSUDL 7,260,87
MSHA STANDARD:SKIN-HUMAN CARCINOGEN, NO ASSIGNED TWA
DTLWS* 3,24,73
OSHA PEL (CONSTRUC):SEE CFR 29,1926.1104
CFRGR 29,1926.55,94
OSHA-CANCER SUSPECT AGENT
CFRGR 29,1910.1004,87
OEL-SWEDEN:CARCINOGEN JAN93
NIOSH REL TO ALPHA-NAPHTHYLAMINE-AIR:CA USE 29 CFR 1910.1004
NIOSH* DHHS #92-100,92
NOHS 1974: HZD 84304; NIS 2; TNF 66; NOS 2; TNE 610
NOES 1983: HZD 84304; NIS 1; TNF 268; NOS 5; TNE 2132; TFE 1796
EPA GENETOX PROGRAM 1988, POSITIVE: CELL TRANSFORM.-SA7/SHE;
HOST-MEDIATED ASSAY
EPA GENETOX PROGRAM 1988, POSITIVE: E COLI POLA WITH S9; HISTIDINE
REVERSION-AMES TEST
EPA GENETOX PROGRAM 1988, NEGATIVE: SHE-CLONAL ASSAY; CELL
TRANSFORM.-RLV F344 RAT EMBRYO
EPA GENETOX PROGRAM 1988, NEGATIVE: E COLI POLA WITHOUT S9; IN VITRO
UDS-HUMAN FIBROBLAST
EPA GENETOX PROGRAM 1988, NEGATIVE: S CEREVISIAE-HOMOZYGOSIS
EPA GENETOX PROGRAM 1988, NEGATIVE/LIMITED: CARCINOGENICITY-MOUSE/RAT
EPA GENETOX PROGRAM 1988, INCONCLUSIVE: MAMMALIAN MICRONUCLEUS; N
CRASSA-FORWARD MUTATION
EPA GENETOX PROGRAM 1988, INCONCLUSIVE: SPERM MORPHOLOGY-MOUSE
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

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EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JULY 1996
NIOSH ANALYTICAL METHOD, 1994: NAPHTHYLAMINES, 5518

U.S. INFORMATION
CALIFORNIA PROPOSITION 65:
THIS PRODUCT IS OR CONTAINS CHEMICAL(S) KNOWN TO THE STATE OF
CALIFORNIA TO CAUSE CANCER.

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

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