



MATERIAL SAFETY DATA SHEET
REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

DATE PREPARED: AUGUST 16, 2007

SECTION 1 - PRODUCT AND COMPANY INFORMATION

PRODUCT NAME SUDAN IV
PRODUCT NUMBER SB0914

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

SUBSTANCE NAME CAS # SARA 313

1-((4-(O-TOLYLAZO)-O-TOLYL)AZO)-2-N 85-83-6 NO

APHTHOL

FORMULA C₂₄H₂₀N₄O

SYNONYMS BIEBRICH SCARLET BPC * BIEBRICH SCARLET RED *

BIEBRICH SCARLET R MEDICINAL * BRASILAZINA OIL

RED B * CALCO OIL RED D * CANDLE SCARLET B *

CANDLE SCARLET 2B * CANDLE SCARLET G * CERES RED

BB * CEROTINE PONCEAU 3B * CERVEN ROZPOUSTEDLOVA

24 (CZECH) * C.I. 258 * C.I. 26105 * C.I. SOLVENT

RED 24 *

2',3-DIMETHYL-4-(2-HYDROXYNAPHTHYLAZO)AZOBENZENE

* DISPERSOL RED PP * ENIAL RED IV * FAST OIL RED

B * FAST RED BB * FAT PONCEAU R * FAT RED B * FAT

RED 2B * FAT RED BB * FAT RED BS * FAT RED TS *

GRASAL BRILLIANT RED B * GRASAN BRILLIANT RED B *

HIDACO OIL RED * LACQUER RED V * LACQUER RED VS *

LIPID CRIMSON *

1-((2-METHYL-4-((2-METHYLPHENYL)AZO)PHENYL)AZO)-2-

NAPHTHALENOL * OIL RED IV * OIL RED 3 * OIL RED 7

* OIL RED 47 * OIL RED 282 * OIL RED A * OIL RED

APT * OIL RED 2B * OIL RED 3B * OIL RED BB * OIL

RED 4B * OIL RED BS * OIL RED D * OIL RED ED *

OIL RED F * OIL RED GO * OIL RED PEL * OIL RED RC

* OIL RED RR * OIL RED S * OIL RED TAX * OIL RED

ZD * OIL SCARLET * OIL SCARLET 48 * OLEAL RED BB

* ORGANOL RED B * ORIENT OIL RED RR * PHENOPLASTE

ORGANOL RED B * PLASTORESIN RED F * RED 3R

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IRRITANT.

IRRITATING TO EYES AND SKIN.

TARGET ORGAN(S): LIVER.

HMIS RATING

HEALTH: 2*

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

*ADDITIONAL CHRONIC HAZARDS PRESENT.

FOR ADDITIONAL INFORMATION ON TOXICITY, PLEASE REFER TO SECTION 11.

SECTION 4 - FIRST AID MEASURES

ORAL EXPOSURE

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

INHALATION EXPOSURE

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

DERMAL EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER.

EYE EXPOSURE

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

SUITABLE: WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER, OR APPROPRIATE FOAM.

FIRE FIGHTING

PROTECTIVE EQUIPMENT: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

SPECIFIC HAZARD(S): EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS, AND HEAVY RUBBER GLOVES.

METHODS FOR CLEANING UP

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.

SECTION 7 - HANDLING AND STORAGE

HANDLING

USER EXPOSURE: DO NOT BREATHE DUST. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.

STORAGE

SUITABLE: KEEP TIGHTLY CLOSED.

SECTION 8 - EXPOSURE CONTROLS / PPE

ENGINEERING CONTROLS

SAFETY SHOWER AND EYE BATH. MECHANICAL EXHAUST REQUIRED.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN

(EU). WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A DUST MASK TYPE N95 (US) OR TYPE P1 (EN 143) RESPIRATOR.
HAND: COMPATIBLE CHEMICAL-RESISTANT GLOVES.
EYE: CHEMICAL SAFETY GOGGLES.
GENERAL HYGIENE MEASURES
WASH THOROUGHLY AFTER HANDLING.

SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE PHYSICAL STATE: SOLID
COLOR: DEEP RED
FORM: POWDER
PROPERTY VALUE AT TEMPERATURE OR PRESSURE
MOLECULAR WEIGHT 380.45 AMU
PH N/A
BP/BP RANGE N/A
MP/MP RANGE 199 °C
FREEZING POINT N/A
VAPOR PRESSURE N/A
VAPOR DENSITY N/A
SATURATED VAPOR CONC. N/A
SG/DENSITY N/A
BULK DENSITY N/A
ODOR THRESHOLD N/A
VOLATILE% N/A
VOC CONTENT N/A
WATER CONTENT N/A
SOLVENT CONTENT N/A
EVAPORATION RATE N/A
VISCOSITY N/A
SURFACE TENSION N/A
PARTITION COEFFICIENT N/A
DECOMPOSITION TEMP. N/A
FLASH POINT N/A
EXPLOSION LIMITS N/A
FLAMMABILITY N/A
AUTOIGNITION TEMP N/A
REFRACTIVE INDEX N/A
OPTICAL ROTATION N/A
MISCELLANEOUS DATA N/A
SOLUBILITY N/A
N/A = NOT AVAILABLE

SECTION 10 - STABILITY AND REACTIVITY

STABILITY
STABLE: STABLE.
MATERIALS TO AVOID: STRONG OXIDIZING AGENTS.
HAZARDOUS DECOMPOSITION PRODUCTS
HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE,
NITROGEN OXIDES.
HAZARDOUS POLYMERIZATION
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11 - TOXICOLOGICAL INFORMATION

ROUTE OF EXPOSURE
SKIN CONTACT: CAUSES SKIN IRRITATION.
SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
EYE CONTACT: CAUSES EYE IRRITATION.

INHALATION: MAY BE HARMFUL IF INHALED. MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.
INGESTION: MAY BE HARMFUL IF SWALLOWED.

TARGET ORGAN(S) OR SYSTEM(S)

LIVER.

SIGNS AND SYMPTOMS OF EXPOSURE

EXPOSURE CAN CAUSE: STOMACH PAINS, VOMITING, DIARRHEA.

CHRONIC EXPOSURE - CARCINOGEN

SPECIES: RAT

ROUTE OF APPLICATION: SUBCUTANEOUS

DOSE: 512 MG/KG

EXPOSURE TIME: 58W

FREQUENCY: C

RESULT: TUMORIGENIC: EQUIVOCAL TUMORIGENIC AGENT BY RTECS

CRITERIA. TUMORIGENIC: TUMORS AT SITE OR APPLICATION.

IARC CARCINOGEN LIST

RATING: GROUP 3

CHRONIC EXPOSURE - MUTAGEN

SPECIES: HAMSTER

DOSE: 100 MG/L

CELL TYPE: EMBRYO

MUTATION TEST: MORPHOLOGICAL TRANSFORMATION.

MUTATION TEST: HISTIDINE REVERSION (AMES)

SECTION 12 - ECOLOGICAL INFORMATION

NO DATA AVAILABLE.

SECTION 13 - DISPOSAL CONSIDERATIONS

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
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

DOT

PROPER SHIPPING NAME: NONE

NON-HAZARDOUS FOR TRANSPORT: THIS SUBSTANCE IS
CONSIDERED TO BE NON-HAZARDOUS FOR TRANSPORT.

IATA

NON-HAZARDOUS FOR AIR TRANSPORT: NON-HAZARDOUS FOR AIR
TRANSPORT.

SECTION 15 - REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION

SYMBOL OF DANGER: XI

INDICATION OF DANGER: IRRITANT.

R: 36/38

RISK STATEMENTS: IRRITATING TO EYES AND SKIN.

S: 26-36

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE
IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR
SUITABLE PROTECTIVE CLOTHING.

US CLASSIFICATION AND LABEL TEXT

INDICATION OF DANGER: IRRITANT.

RISK STATEMENTS: IRRITATING TO EYES AND SKIN.

SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE

IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING.

US STATEMENTS: TARGET ORGAN(S): LIVER.
UNITED STATES REGULATORY INFORMATION

SARA LISTED: NO

TSCA INVENTORY ITEM: YES

CANADA REGULATORY INFORMATION

WHMIS CLASSIFICATION: THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR, AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

DSL: YES

NDSL: NO

SECTION 16 - OTHER INFORMATION

DISCLAIMER

FOR R&D USE ONLY. NOT FOR DRUG, HOUSEHOLD OR OTHER USES.

WARRANTY

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