

BIO BASIC INC.

160 TORBAY ROAD, MARKHAM ONTARIO L3R 1G6 CANADA
TEL: (905) 474 4493, (800) 313 7224 FAX: (905) 474 5794

MATERIAL SAFETY DATA SHEET

REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

MANUFACTURER'S NAME: BIO BASIC INC.
TEL: (905) 474 4493
FAX: (905) 474 5794
FOR CHEMICAL EMERGENCY: (416) 995 9730
ADDRESS: 160 TORBAY ROAD, MARKHAM ONTARIO L3R 1G6 CANADA

DATE PREPARED: JULY 19, 2007

SECTION 1 - PRODUCT INFORMATION

PRODUCT NAME ALIZARIN YELLOW R
PRODUCT NUMBER AB0012

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

SUBSTANCE NAME	CAS #	SARA 313
SALICYLIC ACID, 5-((P-NITROPHENYL)AZO)-	2243-76-7	NO

FORMULA C13H9N3O5

SYNONYMS ACID ALIZARIN YELLOW R * ALIZARINE CHROME ORANGE

G * ALIZARINE ORANGE 2GN * ALIZARINE ORANGE R *

ALIZARINE ORANGE RD * ALIZARINE YELLOW P *

ALIZARINE YELLOW R (INDICATOR) * ALIZARINE YELLOW

R-CF * ALIZARINE YELLOW RW * ALIZARINE ORANGE *

C.I. MORDANT ORANGE 1 * ALIZAROL ORANGE R *

ALPHACROIC ORANGE R * ANTHRANOL CHROME YELLOW R *

AZOCHROMAL ORANGE R * BENZOIC ACID,

2-HYDROXY-5-((4-NITROPHENYL)AZO)- * BRASILIAN

CHROME ORANGE R * CALCOCHROME ORANGE R *

CHROMACID ORANGE S * CHROME FAST ORANGE RW *

CHROME ORANGE MR * CHROME ORANGE N * CHROME

ORANGE R * CHROME ORANGE RLE * CHROME YELLOW 3RN

* CHROMOL ORANGE R EXTRA * C.I. 14030 * DIAMOND

CHROME YELLOW 3R * DUROCHROME YELLOW 2RN *

ENIACROMO ORANGE R * ERIOCHROME ORANGE AOR *

FENAKROM ORANGE R * HIDACHROME ORANGE R *

HISPACROM ORANGE R * JAVA CHROME YELLOW 3R * JAVA

UNICHROME YELLOW 3R * KCA CHROME ORANGE R *

KENACHROME ORANGE * LIGHTHOUSE CHROME ORANGE *

MAGRACROM ORANGE * METACHROME ORANGE R * MITSUI

CHROME ORANGE A * MITSUI CHROME ORANGE AN *

MONOCHROME ORANGE R * MONOCHROME YELLOW 3R *

PARA-NITROBENZENEAZOSALICYLIC ACID * ORTHOCHROME

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HARMFUL.

HARMFUL IF SWALLOWED. IRRITATING TO EYES.

HMIS RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

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

EYE EXPOSURE

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

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

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

FIREFIGHTING

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 TO BE FOLLOWED IN CASE OF LEAK OR SPILL
EVACUATE AREA.

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 BROWN

FORM: POWDER

PROPERTY VALUE AT TEMPERATURE OR PRESSURE

MOLECULAR WEIGHT 287.23 AMU

PH N/A

BP/BP RANGE N/A

MP/MP RANGE 300 °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 LOG KOW: 2.617

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: 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: MAY CAUSE SKIN IRRITATION.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN.
EYE CONTACT: CAUSES EYE IRRITATION.
INHALATION: MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. MAY BE HARMFUL IF INHALED.
INGESTION: HARMFUL IF SWALLOWED.
SIGNS AND SYMPTOMS OF EXPOSURE
THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES OF THIS PRODUCT HAVE NOT BEEN THOROUGHLY INVESTIGATED.
CONDITIONS AGGRAVATED BY EXPOSURE
THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
CHRONIC EXPOSURE - MUTAGEN
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: XN
INDICATION OF DANGER: HARMFUL.
R: 22-36
RISK STATEMENTS: HARMFUL IF SWALLOWED. IRRITATING TO EYES.
S: 26
SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
US CLASSIFICATION AND LABEL TEXT
INDICATION OF DANGER: HARMFUL.
RISK STATEMENTS: HARMFUL IF SWALLOWED. IRRITATING TO EYES.
SAFETY STATEMENTS: IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
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

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. THE INFORMATION IN THIS DOCUMENT IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE AND IS APPLICABLE TO THE PRODUCT WITH REGARD TO APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT ANY GUARANTEE OF THE PROPERTIES OF THE PRODUCT. BIOBASIC, SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE. COPYRIGHT 2007 BIOBASIC. LICENSE GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.