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

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DATE PREPARED: AUGUST 15, 2007

SECTION 1 - PRODUCT AND COMPANY INFORMATION PRODUCT NAME A-NAPHTHALENEACETIC ACID PRODUCT NUMBER NB0729

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

SUBSTANCE NAME CAS # SARA 313 1-NAPHTHYLACETIC ACID 86-87-3 NO

FORMULA C12H10O2

SYNONYMS ACIDE NAPHTHYLACETIQUE (FRENCH) * AGRONAA * ALMAN

* ALPHASPRA * ANU * APPL-SET * BIOKOR * CELMONE * FRUITOFIX * FRUITONE N * KYSELINA 1-NAFTYLOCTOVA

(CZECH) * KLINGTITE * LIQUI-STIK * NAA * ALPHA-NAA * 1-NAA * NAA 800 * NAFUSAKU *

NAPHTHALENEACETIC ACID * NAPHTHALENE-1-ACETIC

ACID * ALPHA-NAPHTHALENEACETIC ACID *

ALPHA-NAPHTHYLACETIC * NAPHTHYLACETIC ACID *

ALPHA-NAPHTHYLACETIC ACID * 1-NAPHTHYLACETIC ACID

* 2-(1-NAPHTHYL)ACETIC ACID *

ALPHA-NAPHTHYLENEACETIC ACID *

ALPHA-NAPHTHYLESSIGSAEURE (GERMAN) *

NAPHYL-1-ESSIGSAEURE (GERMAN) * NIAGARA-STIK *

NU-TONE * PHYOMONE * PIMACOL-SOL * PLANOFIX *

PLANOFIXE * PLUCKER * POMOXON * PRIMACOL * RASIN

* RHODOFIX * STAFAST * STIK * STOP-DROP * TEKKAM

* TIP-OFF * TRANSPLANTONE * TRE-HOLD * VARDHAK

RTECS NUMBER: QJ0875000

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HARMFUL.

HARMFUL IF SWALLOWED. IRRITATING TO RESPIRATORY SYSTEM AND SKIN.

RISK OF SERIOUS DAMAGE TO EYES.

TARGET ORGAN(S): CENTRAL NERVOUS SYSTEM.

HMIS RATING HEALTH: 2* FLAMMABILITY: 0

FLAMMABILITY: 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 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: SLIGHTLY YELLOW

FORM: POWDER

PROPERTY VALUE AT TEMPERATURE OR PRESSURE

MOLECULAR WEIGHT 186.21 AMU

PH N/A

BP/BP RANGE N/A

MP/MP RANGE 130 ℃

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, STRONG BASES.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE.

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 SEVERE EYE IRRITATION.

INHALATION: MAY BE HARMFUL IF INHALED. MATERIAL IS IRRITATING TO

MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

INGESTION: HARMFUL IF SWALLOWED.

TARGET ORGAN(S) OR SYSTEM(S)

CENTRAL NERVOUS SYSTEM.

SIGNS AND SYMPTOMS OF EXPOSURE

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND

TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

TOXICITY DATA

ORAL

RAT

1000 MG/KG

LD50

INHALATION

RAT

> 207,000 MG/M3

LC50

INTRAPERITONEAL

RAT

100 MG/KG

LD50

ORAL

MOUSE

743 MG/KG

LD50

INTRAPERITONEAL

MOUSE

609 MG/KG

LD50

SUBCUTANEOUS

MOUSE

733 MG/KG

LD50

SKIN

RABBIT

> 5000 MG/KG

LD50

IRRITATION DATA

EYES RABBIT 100 MG

REMARKS: SEVERE IRRITATION EFFECT

CHRONIC EXPOSURE - MUTAGEN

SPECIES: HUMAN DOSE: 100 NMOL/L CELL TYPE: LEUKOCYTE

MUTATION TEST: OTHER MUTATION TEST SYSTEMS

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: 22-37/38-41

RISK STATEMENTS: HARMFUL IF SWALLOWED. IRRITATING TO RESPIRATORY

SYSTEM AND SKIN. RISK OF SERIOUS DAMAGE TO EYES.

S: 22-26-36

SAFETY STATEMENTS: DO NOT BREATHE DUST. 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: HARMFUL.

RISK STATEMENTS: HARMFUL IF SWALLOWED. IRRITATING TO RESPIRATORY

SYSTEM AND SKIN. RISK OF SERIOUS DAMAGE TO EYES.

SAFETY STATEMENTS: DO NOT BREATHE DUST. 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): CENTRAL NERVOUS SYSTEM.

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

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