

# BIO BASIC INC.

20 KONRAD CRES, MARKHAM ONTARIO L3R 8T4 CANADA  
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## MATERIAL SAFETY DATA SHEET

REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

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DATE UPDATED: APRIL 19, 2013

### SECTION 1 - PRODUCT AND COMPANY INFORMATION

PRODUCT NAME BENZAMIDE, SUBLIMED, ZONE-REFINED, 99.9%  
PRODUCT NUMBER BB0122

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

SUBSTANCE NAME	CAS #	SARA 313
BENZAMIDE	55-21-0	YES

FORMULA C7H7NO

SYNONYMS AMID KYSELINY BENZOOVE (CZECH) \*

BENZENECARBOXAMIDE \* BENZOIC ACID AMIDE \*

BENZOYLAMIDE \* PHENYLCARBOXAMIDE \*

PHENYLCARBOXYAMIDE

RTECS NUMBER: CU8700000

### SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HARMFUL.

HARMFUL IF SWALLOWED.

HMIS RATING

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING

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 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

356 °F 180 °C METHOD: CLOSED CUP

#### AUTOIGNITION TEMP

>= 500 °C

#### 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.

EXPOSURE HAZARD(S)

MATERIAL: HARMFUL SOLID.

#### 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: AVOID INHALATION. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. AVOID PROLONGED OR REPEATED EXPOSURE.

##### STORAGE

SUITABLE: KEEP TIGHTLY CLOSED. STORE IN A COOL DRY PLACE.

#### 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. WASH CONTAMINATED CLOTHING BEFORE REUSE.

#### SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE COLOR: FAINTLY BEIGE

FORM: POWDER

PROPERTY VALUE AT TEMPERATURE OR PRESSURE

MOLECULAR WEIGHT 121.14 AMU

PH 6.9

BP/BP RANGE N/A

MP/MP RANGE 125 °C

FREEZING POINT N/A

VAPOR PRESSURE < 0.001 MMHG 50 °C

VAPOR DENSITY N/A

SATURATED VAPOR CONC. N/A  
SG/DENSITY 1.34 G/CM<sup>3</sup> 20 °C  
BULK DENSITY 0.55 KG/L  
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: 0.64  
DECOMPOSITION TEMP. N/A  
FLASH POINT 356 °F 180 °C METHOD: CLOSED CUP  
EXPLOSION LIMITS N/A  
FLAMMABILITY N/A  
AUTOIGNITION TEMP >= 500 °C  
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

MATERIALS TO AVOID: STRONG OXIDIZING AGENTS, STRONG BASES.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE,  
NITROGEN OXIDES.

#### 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: MAY CAUSE EYE IRRITATION.

INHALATION: MAY BE HARMFUL IF INHALED.

INGESTION: HARMFUL IF SWALLOWED.

##### SIGNS AND SYMPTOMS OF EXPOSURE

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

##### TOXICITY DATA

###### INTRAPERITONEAL

RAT

781 MG/KG

LD50

REMARKS: SENSE ORGANS AND SPECIAL SENSES (NOSE, EYE, EAR, AND  
TASTE):EYE:PTOSIS. BEHAVIORAL:MUSCLE WEAKNESS. LUNGS, THORAX, OR  
RESPIRATION:ACUTE PULMONARY EDEMA.

###### ORAL

MOUSE

1160 MG/KG

LD50

###### INTRAPERITONEAL

MOUSE

1282 MG/KG

LD50

REMARKS: LUNGS, THORAX, OR RESPIRATION:ACUTE PULMONARY EDEMA.  
BEHAVIORAL:MUSCLE WEAKNESS. SENSE ORGANS AND SPECIAL SENSES

(NOSE, EYE, EAR, AND TASTE):EYE:PTOSIS.  
CHRONIC EXPOSURE - MUTAGEN  
SPECIES: HUMAN  
DOSE: 300 UMOL/L  
CELL TYPE: LYMPHOCYTE  
MUTATION TEST: SISTER CHROMATID EXCHANGE  
SPECIES: MOUSE  
ROUTE: ORAL  
DOSE: 1650 UMOL/KG  
MUTATION TEST: MICRONUCLEUS TEST  
SPECIES: MOUSE  
DOSE: 1 MMOL/L  
CELL TYPE: LEUKOCYTE  
MUTATION TEST: SISTER CHROMATID EXCHANGE  
SPECIES: HAMSTER  
DOSE: 1 MMOL/L  
CELL TYPE: OVARY  
MUTATION TEST: SISTER CHROMATID EXCHANGE  
SPECIES: MAMMAL  
DOSE: 1000 PPM  
CELL TYPE: KIDNEY  
MUTATION TEST: MICRONUCLEUS TEST  
SPECIES: MAMMAL  
DOSE: 1000 PPM  
EXPOSURE TIME: 8H  
CELL TYPE: KIDNEY  
MUTATION TEST: OTHER MUTATION TEST SYSTEMS  
SPECIES: MAMMAL  
DOSE: 1000 PPM  
CELL TYPE: KIDNEY  
MUTATION TEST: CYTOGENETIC ANALYSIS

SECTION 12 - ECOLOGICAL INFORMATION  
NO DATA AVAILABLE.

SECTION 13 - DISPOSAL CONSIDERATIONS  
APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION  
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  
RISK STATEMENTS: HARMFUL IF SWALLOWED.  
S: 22-24/25

SAFETY STATEMENTS: DO NOT BREATHE DUST. AVOID CONTACT WITH SKIN AND EYES.

US CLASSIFICATION AND LABEL TEXT

INDICATION OF DANGER: HARMFUL.

RISK STATEMENTS: HARMFUL IF SWALLOWED.

SAFETY STATEMENTS: WEAR SUITABLE PROTECTIVE CLOTHING.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: YES

DEMINIMIS: 1 %

NOTES: THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

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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