



STARK INDUSTRIAL
527 DUNDONALD STREET, FREDERICTON, NB, E3B 1X5
CANADA 1-888-709-7773

PRODUCT: 6I ; C: :



Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER STARK INDUSTRIAL
527 DUNDONALD STREET, FREDERICTON
NEW BRUNSWICK
CANADA
E3B 1X5

PRODUCT NAME BUG OFF Insect Repellent
CHEMICAL FAMILY N,N-DIETHYL M-TOLUAMIDE.
MOLECULAR WEIGHT NOT APPLICABLE.
CHEMICAL FORMULA MIXTURE.
TRADE NAMES & SYNONYMS BUG OFF Insect Repellent
PRODUCT USES INSECT REPELLENT.

Section 02: COMPOSITION/INFORMATION INGREDIENTS

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
N,N-DIETHYL m-TOLUAMIDE	30.00	NOT AVAILABLE	134-62-3	2000 mg/kg ORAL-RAT	5950 mg/kg INHAL-RAT
ETHANOL	30-60	1000 ppm	64-17-5	7060 mg/kg ORAL - RAT	31,623 ppm (4 hr) INHAL - RAT
ISOBUTANE	10-30	1000 ppm	75-28-5	NOT APPLICABLE	142,500 ppm (4h) INHAL - RAT
PROPANE	1-5	1000 ppm	74-98-6	NOT APPLICABLE	NOT AVAILABLE

Section 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY:
INGESTION MAY CAUSE HEADACHE, NAUSEA, VOMITING AND WEAKNESS.
INHALATION INHALATION OF SOLVENTS MAY CAUSE IRRITATION. PROPELLANT IS A SIMPLE ASPHYXIANT.
EYE CONTACT MAY CAUSE IRRITATION.
SKIN ABSORPTION ETHANOL CAN BE ABSORBED IN TOXIC AMOUNTS, ESPECIALLY FROM PROLONGED OR REPEATED EXPOSURE.
SKIN CONTACT MAY CAUSE IRRITATION.
EFFECTS OF ACUTE EXPOSURE ETHANOL-LONG TERM REPEATED ORAL EXPOSURE MAY RESULT IN THE DEVELOPMENT OF PROGRESSIVE LIVER INJURY WITH FIBROSIS.
EFFECTS OF CHRONIC EXPOSURE SOLVENTS MAY CAUSE DEFATTING DERMATITIS
EXPOSURE LIMIT OF MATERIAL SEE SECTION 2.

Section 04: FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURE IN CASE OF EYE CONTACT, FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION. FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOUR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED; DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION.

Section 05: FIRE FIGHTING MEASURES

AUTO IGNITION TEMPERATURE (°C) 422.
SPECIAL PROCEDURES WATER FROM FOGGING NOZZLES MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT BUILD-UP IF EXPOSED TO EXTREME TEMPERATURES. FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN IN A FIRE INVOLVING THIS MATERIAL.
FLAMMABILITY EXTREMELY FLAMMABLE.
IF YES, UNDER WHICH CONDITIONS? EXCESSIVE HEAT, SPARKS AND OPEN FLAME.
EXTINGUISHING MEDIA WATER, CARBON DIOXIDE, DRY CHEMICAL, FOAM.
UPPER FLAMMABLE LIMIT 19.
(% BY VOLUME)
LOWER FLAMMABLE LIMIT 1.9.
(% BY VOLUME)
EXPLOSION DATA
SENSITIVITY TO STATIC DISCHARGE NOT APPLICABLE.
SENSITIVITY TO IMPACT NOT APPLICABLE.
HAZARDOUS COMBUSTION PRODUCTS HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.
AEROSOL FLAME PROJECTION
CLASSIFIED AS: >15cm BUT <100cm.
FLASHBACK YES.

PRODUCT: 11111-BT527 BETTER THAN INSECT REPELLLET MAX**Section 05: FIRE FIGHTING MEASURES**

FLASH POINT(°C),TAG CLOSED-CUP LOWEST VALUE KNOWN IS ETHANOL @ 13C.
(CONCENTRATE)

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... REMOVE ALL SOURCES OF IGNITION. USE AN INERT ABSORBENT MATERIAL, AND
NON-SPARKING TOOLS. VENTILATE AREA. PREVENT FROM ENTERING A WATERCOURSE.

Section 07: HANDLING AND STORAGE

STORAGE NEEDS..... KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES.
ENGINEERING CONTROLS..... VENTILATION - LOCAL (MECHANICAL IF USED INDOORS ON A CONTINUOUS BASIS).
HANDLING PROCEDURES AND EQUIPMENT..... STORE IN A COOL, WELL VENTILATED AREA NOT TO EXCEED 50 DEG C.
SYNERGISTIC MATERIALS..... NONE KNOWN.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE..... NOT NORMALLY REQUIRED.
RESPIRATORY/TYPE..... NOT NORMALLY REQUIRED.
EYE/TYPE..... SAFETY GLASSES.
FOOTWEAR/TYPE..... NOT NORMALLY REQUIRED.
OTHER/TYPE..... NOT REQUIRED.

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... AEROSOL.
APPEARANCE..... CLEAR AMBER LIQUID.
ODOR..... FRAGRANT.
ODOR THRESHOLD..... NOT AVAILABLE.
VAPOUR PRESSURE(PSIG)-AEROSOL..... 40 - 50.
@ 20 C
BOILING POINT (°C)(CONC)..... >78.
EVAPORATION RATE..... GREATER THAN 1.
n-BUTYL ACETATE = 1
VAPOUR DENSITY (AIR=1)..... GREATER THAN 1.
(BY WEIGHT)
SOLUBILITY IN WATER g/L (20°C)..... NOT AVAILABLE.
pH..... NOT APPLICABLE.
SPECIFIC GRAVITY (LIQUID)..... 0.85-0.89.
COEFFICIENT OF WATER/OIL DIST..... NOT AVAILABLE.
FREEZING POINT: (°C)..... NOT AVAILABLE.
AEROSOL PERCENT VOLATILE..... 74-75.
(BY WEIGHT).
SPECIFIC GRAVITY (AEROSOL)..... 0.75-0.79.

Section 10: STABILITY AND REACTIVITY

HAZARDOUS PRODUCTS OF
DECOMPOSITION..... HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS
INCOMPLETE.
CHEMICAL STABILITY:
YES..... UNDER NORMAL CONDITIONS.
NO, WHICH CONDITIONS?..... NOT APPLICABLE.
COMPATIBILITY WITH OTHER SUBSTANCES:
NO, WHICH ONES?..... STRONG OXIDIZING AGENTS.
REACTIVITY CONDITIONS?..... NOT APPLICABLE.
HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

REPRODUCTIVE EFFECTS..... NO INFORMATION IS AVAILABLE AND NO ADVERSE REPRODUCTIVE EFFECTS ARE
ANTICIPATED.
IRRITANCY OF MATERIAL..... SKIN/EYE IRRITANT.
SENSITIZING CAPABILITY OF MATERIAL..... UNKNOWN.
CARCINOGENICITY OF MATERIAL..... THE INGREDIENTS OF THIS PRODUCT ARE NOT LISTED AS CARCINOGENS BY NTP,
(NATIONAL TOXICOLOGY PROGRAM), NOT REGULATED AS CARCINOGENS BY OSHA,
(OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION), AND HAVE NOT BEEN EVALUATED
BY IARC,(INTERNATIONAL AGENCY FOR RESEARCH ON CANCER), NOR BY ACGIH
(AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS).
TERATOGENICITY..... NO INFORMATION IS AVAILABLE AND NO ADVERSE TERATOGENIC EFFECTS ARE
ANTICIPATED.
MUTAGENICITY..... NO INFORMATION IS AVAILABLE AND NO ADVERSE MUTAGENIC EFFECTS ARE
ANTICIPATED.

PRODUCT: 11111-BT527 BETTER THAN INSECT REPELLLET MAX**Section 12: ECOLOGICAL CONSIDERATIONS**

ENVIRONMENTAL..... NOT AVAILABLE.

Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... DO NOT PUNCTURE OR INCINERATE CONTAINERS, EVEN WHEN EMPTY. DISPOSE OF IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.

Section 14: TRANSPORTATION INFORMATIONT.D.G. CLASSIFICATION..... CONSUMER COMMODITY (AEROSOLS, UN1950, CLASS 2.1).
D.O.T. CLASSIFICATION..... CONSUMER COMMODITY, ORM-D.**Section 15: REGULATORY INFORMATION****CANADIAN REGULATIONS:**WHMIS CLASSIFICATION..... NOT REGULATED BY WHMIS.
CNFC SECTION 3.3.5..... LEVEL 3.
CEPA (Canadian Environmental Protection Act) ALL SUBSTANCES IN THIS PRODUCT ARE LISTED ON THE CANADIAN DOMESTIC SUBSTANCES LIST (DSL) OR ARE NOT REQUIRED TO BE LISTED.**U.S. REGULATIONS:**HMIS RATING HEALTH..... 2 MODERATE HAZARD.
HMIS RATING FLAMMABILITY..... 4 SEVERE HAZARD.
HMIS RATING REACTIVITY..... 0 MINIMAL HAZARD.
HMIS RATING PERSONAL PROTECTION..... B.
NFPA CODE 30B..... LEVEL 3.
SARA 313 INFORMATION: THIS PRODUCT CONTAINS NO INGREDIENTS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372.
CAS #: CHEMICAL NAME:
N/A.
CALIFORNIA PROPOSITION 65: THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY WITH THE CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986:
WARNING: THIS PRODUCT DOES NOT INTENTIONALLY CONTAIN ANY CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
CAS #: CHEMICAL NAME:
N/A.
TSCA (Toxic Substances Control Act)..... ALL COMPONENT OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. ANY IMPURITIES PRESENT IN THIS PRODUCT ARE EXEMPT FROM LISTING.
VOC (w/w%)..... 74-75.**Section 16: OTHER INFORMATION**NOTICE FROM STARK INDUSTRIAL..... THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY STARK INDUSTRIAL FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. STARK INDUSTRIAL ASSUMES NO RESPONSIBILITY FOR EVENTS RESULTING OR DAMAGES INCURRED FROM ITS USE. THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS.
PREPARED BY..... STARK INDUSTRIAL
PREPARATION DATE Nov 2, 2016