

BRODI SPECIALTY PRODUCTS LTD  
3175 14th AVENUE, UNIT 1  
MARKHAM; ONTARIO; L3R 0H1  
CANADA

**PRODUCT: BUGGO Contact Insecticide for Flying & Crawling Insects****Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

MANUFACTURER ..... Brodi Specialty Products Ltd.  
3175 14th Avenue, Unit 1  
Markham,  
Ontario  
Canada  
L3R 0H1  
905-475-6084

PRODUCT NAME..... BUGGO Contact Insecticide for Flying & Crawling Insects  
CHEMICAL FAMILY..... D-TRANS ALLETHRIN/PIPERONYL BUTOXIDE.  
MOLECULAR WEIGHT..... NOT APPLICABLE.  
CHEMICAL FORMULA..... NOT APPLICABLE.  
TRADE NAMES & SYNONYMS..... BUGGO Contact Insecticide for Flying & Crawling Insects  
PRODUCT USES..... INSECTICIDE.  
FORMULA/LAB BOOK #..... 04-103.

**Section 02: COMPOSITION/INFORMATION INGREDIENTS**

Hazardous Ingredients	%	Exposure Limit	C.A.S.#	LD/50, Route,Species	LC/50 Route,Species
PIPERONYL BUTOXIDE	0.9524	NOT AVAILABLE	51-03-6	4.6 g/kg ORAL-RAT	>5.9 mg/l
D-TRANS ALLETHRIN	0.250. 0.238.				
ALIPHATIC PETROLEUM DISTILLATES	5-10	300 ppm	64742-47-8	>5000 mg/kg ORAL-RAT	NOT AVAILABLE
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..... NO DATA AVAILABLE FOR THIS PRODUCT MIXTURE.  
SKIN CONTACT..... MAY CAUSE IRRITATION.  
EFFECTS OF ACUTE EXPOSURE..... DIZZINESS, NAUSEA. IRRITATION TO SKIN & EYES.  
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)..... NOT AVAILABLE.  
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..... NOT FLAMMABLE.  
IF YES, UNDER WHICH CONDITIONS?..... EXCESSIVE HEAT, SPARKS AND OPEN FLAME.  
EXTINGUISHING MEDIA..... WATER, CARBON DIOXIDE, DRY CHEMICAL, FOAM.  
UPPER FLAMMABLE LIMIT..... 9.5.  
(% BY VOLUME)  
LOWER FLAMMABLE LIMIT..... 0.6.  
(% 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:..... 0 cm.  
FLASHBACK..... NONE.  
FLASH POINT(°C),TAG CLOSED-CUP ..... 78.  
(CONCENTRATE)

**PRODUCT: BUGGO Contact Insecticide for Flying & Crawling Insects****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..... WEAR CHEMICAL RESISTANT GLOVES.  
 RESPIRATORY/TYPE..... IF USED INDOORS ON A CONTINUOUS BASIS, USE OF A CARTRIDGE TYPE RESPIRATOR (NIOSH/MSHATC 23C OR EQUIVALENT) IS RECOMMENDED.  
 EYE/TYPE..... SAFETY GLASSES.  
 FOOTWEAR/TYPE..... NOT NORMALLY REQUIRED.  
 OTHER/TYPE..... NOT REQUIRED.

**Section 09: PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE..... AEROSOL.  
 APPEARANCE..... WHITE EMULSION.  
 ODOR..... INSECTICIDE.  
 ODOR THRESHOLD..... NOT AVAILABLE.  
 VAPOUR PRESSURE(PSIG)-AEROSOL..... 35 - 45.  
 @ 20 C  
 BOILING POINT (°C)(CONC)..... 100-255.  
 EVAPORATION RATE..... LESS THAN 1.  
 n-BUTYL ACETATE = 1  
 VAPOUR DENSITY (AIR=1)..... GREATER THAN 1.  
 (BY WEIGHT)  
 SOLUBILITY IN WATER g/L (20°C)..... NEGLIGIBLE.  
 pH..... NOT APPLICABLE.  
 SPECIFIC GRAVITY (LIQUID)..... 0.94-0.98.  
 COEFFICIENT OF WATER/OIL DIST..... NOT AVAILABLE.  
 FREEZING POINT: (°C)..... NOT AVAILABLE.  
 AEROSOL PERCENT VOLATILE..... 99-100.  
 (BY WEIGHT).  
 SPECIFIC GRAVITY (AEROSOL)..... 0.76-0.80.  
 AEROSOL PERCENT VOC (w/w)..... 33-34.

**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.

**Section 11: TOXICOLOGICAL INFORMATION**

REPRODUCTIVE EFFECTS..... NO INFORMATION IS AVAILABLE AND NO ADVERSE REPRODUCTIVE EFFECTS ARE ANTICIPATED.  
 IRRITANCY OF MATERIAL..... SLIGHT.  
 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.

**Section 12: ECOLOGICAL CONSIDERATIONS**

ENVIRONMENTAL..... NOT AVAILABLE.

**PRODUCT: BUGGO Contact Insecticide for Flying & Crawling Insects****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 INFORMATION**

T.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 1.  
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..... 1 SLIGHT HAZARD.  
HMIS RATING REACTIVITY..... 0 MINIMAL HAZARD.  
HMIS RATING PERSONAL PROTECTION..... B.  
NFPA CODE 30B..... LEVEL 1.  
SARA 313 INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:  
CAS #: CHEMICAL NAME:  
\*51-03-6 PIPERONYL BUTOXIDE.  
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%)..... 33-34.

**Section 16: OTHER INFORMATION**

NOTICE FROM BRODI SPECIALTY PRODUCTS LTD. THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY BRODI SPECIALTY PRODUCTS LTD. FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. BRODI SPECIALTY PRODUCTS LTD. 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..... MSDS Co-ordinator, (877-744-0751) ext 205, Brodi Specialty Products Ltd.  
PREPARATION DATE ..... Mar02/10