

MATERIAL SAFETY DATA SHEET

KUUS INC. (Division of KNOCKDOWN)

KNOCKDOWN BED BUG KILLER

Effective Date: October 1, 2012

1. MATERIAL IDENTIFICATION AND USE

MANUFACTURER'S NAME KUUS INC. (Division of KNOCKDOWN)
MANUFACTURER'S ADDRESS 450 TAPSCOTT ROAD, UNIT 5 & 6
SCARBOROUGH, ONTARIO M1B 1Y4
MANUFACTURER'S TELEPHONE NO. (416) 298-7724
SUPPLIER IDENTIFIER AS MANUFACTURER
SUPPLIER'S ADDRESS AS MANUFACTURER
SUPPLIER'S TELEPHONE NO. AS MANUFACTURER
PRODUCT IDENTIFIER **KNOCKDOWN BED BUG KILLER**
FORMULA: DOMESTIC
PRODUCT CODE **KD111D**
PRODUCT USE INSECTICIDE

2. HAZARDOUS INGREDIENTS OF MATERIALS

INGREDIENTS	PERCENTAGE (%)	CAS NUMBER:	LD50(species/route)	LD50(species/route)
Pyrethrins	0.250	8003-34-7	1680mg/kg (oral-rat)	Not Available
Piperonyl Butoxide	1.250	51-03-6	4.6g/kg (oral-rat)	>5.9mg/l
Aliphatic Petroleum Distillates	7-13	64742-47-8	>5000mg/kg (oral-rat)	Not Available
Isobutane	10-30	75-28-5	Not Applicable	142500ppm/4h (inhal-rat)
Propane	1-5	74-98-6	Not Applicable	Not Available

3. PHYSICAL DATA FOR PRODUCT

PHYSICAL STATE AEROSOL
ODOUR AND APPEARANCE OFF-WHITE EMULSION. PYRETHRIN.
VAPOUR PRESSURE (mm Hg) 40-50 at 20°C
SPECIFIC GRAVITY 0.76-0.80
EVAPORATION RATE (N-BUTYL ACETATE=1): GREATER THAN 1
VAPOUR DENSITY (AIR=1): GREATER THAN 1
% VOLATILE (BY WEIGHT): 92-93

BOILING POINT	100°C
SOLUBILITY IN WATER (20°C)	SOLUBLE

4. FIRE AND EXPLOSION HAZARD OF PRODUCT

EXTINGUISHING MEDIA	WATER, CARBON DIOXIDE, DRY CHEMICAL, FOAM.
FLASHPOINT	78°C
UPPER EXPLOSION LIMIT (% BY VOL)	9.5
LOWER EXPLOSION LIMIT (% BY VOL)	0.6
SPECIAL PROCEDURES	FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN.

5. REACTIVITY DATA

CHEMICAL STABILITY	STABLE
INCOMPATIBLE MATERIALS	STRONG OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION PRODUCTS	HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.

6. TOXICOLOGICAL PROPERTIES OF PRODUCT

SHORT TERM EFFECTS OF EXPOSURE

ROUTE OF ENTRY

SKIN CONTACT	YES
EYE CONTACT	YES
ACUTE EFFECTS – INGESTION	HEADACHE, NAUSEA, VOMITING AND WEAKNESS
ACUTE EFFECTS – SKIN CONTACT	FREQUENT OR PROLONGED CONTACT MAY IRRITATE THE SKIN.
ACUTE EFFECTS – INHALATION	INHALATION OF SOLVENTS MAY CAUSE IRRITATION. PROPELLANT IS A SIMPLE ASPHYXIANT.
ACUTE EFFECTS – EYE	FREQUENT OR PROLONGED CONTACT TO VAPOURS MAY IRRITATE THE EYES.

7. TOXICOLOGICAL PROPERTIES OF PRODUCT (CONT'D)

LONG TERM EFFECTS OF EXPOSURE

EFFECTS OF CHRONIC EXPOSURE
TARGET ORGANS SOLVENTS MAY CAUSE DEFATTING DERMATITIS

SPECIAL HEALTH EFFECTS

CARCINOGENICITY NO

8. PREVENTIVE MEASURES

CONDITIONS UNDER WHICH PPE REQ'D	NORMAL WORK CONDITIONS
EYE PROTECTION REQUIREMENTS	NONE REQUIRED FOR NORMAL USAGE. WEAR SAFETY GLASSES
GLOVE REQUIREMENTS	NOT NORMALLY REQUIRED
CLOTHING REQUIREMENTS	NOT NORMALLY REQUIRED
RESPIRATOR REQUIREMENTS	NONE REQUIRED FOR NORMAL USAGE.
ENGINEERING CONTROLS REQUIRED	VENTILATION
SPILL AND LEAK PROCEDURES	REMOVE ALL SOURCES OF IGNITION. USE AN INERT ABSORBENT MATERIAL, AND NON-SPARKING TOOLS. VENTILATE AREA. PREVENT FROM ENTERING A WATERCOURSE.
WASTE DISPOSAL METHODS	DO NOT PUNCTURE OR INCINERATE CONTAINERS, EVEN WHEN EMPTY. DISPOSE OF IN ACCORDANCE WITH LOCAL, PROVINCIAL, AND FEDERAL REGULATIONS.
STORAGE TEMPERATURE	AMBIENT
HANDLING/STORAGE	KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. STORE IN COOL, WELL VENTILATED AREA NOT TO EXCEED 50°C.

9. FIRST AID MEASURES

INGESTION	IF SWALLOWED, DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION.
SKIN CONTACT	WASH THOROUGHLY WITH SOAP AND WATER.
INHALATION	IF INHALATION OR VAPOUR OR SPRAY MIST, REMOVE TO FRESH AIR.

10. FIRST AID MEASURES

EYE FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION.

11. REGULATORY INFORMATION

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION
CNFC SECTION 3.3.5
CEPA (Canadian Environmental Protection Act)

NOT REGULATED BY WHMIS.
LEVEL 1.
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
HMIS RATING FLAMMABILITY
HMIS RATING REACTIVITY
HMIS RATING PERSONAL PROTECTION
NFPA CODE 30B
SARA 313 INFORMATION

2 MODERATE HAZARD.
1 SLIGHT HAZARD.
0 MINIMAL HAZARD.
B.
LEVEL 1.
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%)

32-33.

12. TRANSPORTATION INFORMATION

T.D.G. CLASSIFICATION

CONSUMER COMMODITY (AEROSOLS, UN1950, CLASS 2.1).

D.O.T. CLASSIFICATION

CONSUMER COMMODITY, ORM-D.

