

KUUS INC. 450 TAPSCOTT ROAD, UNIT 5 & 6 TORONTO, ON M1B 1Y4 CANADA					
PRODUCT: MS0020 MOSQUITO SHIELD PIACTIVE INSECT REPELLENT PUMP SPRAY/LIQUID (20% ICARIDIN)					
Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION					
MANUFACTURER.....	KUUS INC. 450 TAPSCOTT ROAD, UNIT 5 & 6 TORONTO, ON M1B 1Y4 (800) 267-0455				
PRODUCT NAME	MOSQUITO SHIELD PIACTIVE KIDS REPELLENT PUMP SPRAY/LIQUID (20% ICARIDIN)				
MOLECULAR WEIGHT.....	NOT APPLICABLE				
CHEMICAL FORMULA.....	MIXTURE				
TRADE NAMES & SYNONYMS.....	MOSQUITO SHIELD PIACTIVE REPELLENT PUMP SPRAY/LIQUID (20% ICARIDIN)				
PRODUCT USES.....	REPELLENT				
FORMULA #	NOT AVAILABLE				
Section 02: COMPOSITION/INFORMATION INGREDIENTS					
<u>Hazardous Ingredients</u>	<u>%</u>	<u>Exposure Limit</u>	<u>C.A.S. #</u>	<u>LD/50, Route, Species</u>	<u>LC/50 Route, Species</u>
ICARIDIN	20	400ppm	119515-38-7	5050 mg/kg ORAL-RAT	>5020mg/kg DERMAL
Section 03: HAZARDS IDENTIFICATION					
PHYSICAL STATE:.....	LIQUID				
ODOR:.....	SLIGHT ALCOHOL				
COLOR:.....	COLORLESS TO LIGHT YELLOW				
EMERGENCY OVERVIEW:.....	WARNING! FLAMMABLE LIQUID AND VAPOR. USE COLD WATER SPRAY TO COOL FIRE AND EXPOSED CONTAINERS TO MINIMIZE THE RISK OF RUPTURE. CAUSES EYE IRRITATION. MAY CAUSE RESPIRATORY TRACT AND SKIN IRRITATION. MAY CAUSE NAUSEA OR DIZZINESS.				
MEDICAL CONDITIONS AGGRAVATED BY OVER EXPOSURE:.....	PRE-EXISTING RESPIRATORY, SKIN AND EYE DISORDERS AND DISORDERS INVOLVING ANY OTHER TARGET ORGANS MENTIONED IN THIS MSDS AS BEING AT RISK MAY BE AGGRAVATED BY OVER-EXPOSURE TO THID PRODUCT.				
ROUTE OF ENTRY:					
INGESTION.....	MAY CAUSE HEADACHE, NAUSEA, VOMITING, DIZZINESS, NUMBNESS AND WEAKNESS.				
INHALATION.....	INHALATION OF SOLVENTS MAY CAUSE IRRITATION.				
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.....	MAY CAUSE VARIOUS NEUROTOXIC EFFECTS.				
CARCINOGENICITY.....	NO CARCINOGENIC SUBSTANCES AS DEFINED BY IARC, NTP, OSHA AND/OR ACGIH				
EXPOSURE LIMIT OF MATERIAL.....	SEE SECTION 2.				

Section 04: FIRST AID MEASURES	
EYE CONTACT:.....	CHECK FOR AND REMOVE ANY CONTACT LENSES. IN CASE OF CONTACT, FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 20 MINUTES. USE FINGERS TO ENSURE THAT EYELIDS ARE SEPARATED AND THAT THE EYE IS BEING IRRIGATED. CALL PHYSICIAN IMMEDIATELY.
SKIN CONTACT:.....	WASH WITH PLENTY OF SOAP AND WATER. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR. WASH CLOTHING BEFORE REUSE. CLEAN SHOES THOROUGHLY BEFORE REUSE.
INHALATION:.....	IF INHALED, REMOVE TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.
INGESTION:.....	WASH OUT MOUTH WITH WATER. DO NOT INDUCE VOMITTING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.
NOTES TO PHYSICIAN:.....	IN CASE OF INHALATION OF DECOMPOSITION PRODUCTS IN A FIRE, SYMPTOMS MAY BE DELAYED. THE EXPOSED PERSON MAY NEED TO BE KEPT UNDER MEDICAL SURVEILLANCE FOR 48 HOURS.
Section 05: FIRE FIGHTING MEASURES	
EXTINGUISHING MEDIA	
SUITABLE:.....	USE DRY CHEMICAL, CO2, WATER SPRAY (FOG) OR FOAM
NOT SUITABLE:.....	DO NOT USE WATER JET.
FLASH POINT.....	CLOSED CUP: 28 °C (82.4°F)
FLAMMABLE LIMITS:.....	NOT AVAILABLE
AUTO IGNITION TEMPERATURE (°C)	NOT AVAILABLE
SPECIAL EXPOSURE HAZARDS:.....	MOVE CONTAINERS FROM FIRE AREA IF THIS CAN BE DONE WITHOUT RISK. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL. IF INVOLVED IN FIRE, SHUT OFF FLOW IMMEDIATELY IF IT CAN BE DONE WITHOUT RISK. IF THIS IS IMPOSSIBLE, WITHDRAW FROM AREA AND ALLOW FIRE TO BURN. FIGHT FIRE FROM PROTECTED LOCATION OR MAXIMUM POSSIBLE DISTANCE. VAPORS MAY SPREAD LONG DISTANCES AND IGNITE. VAPORS OR MIST MAY BE A FIRE AND EXPLOSION HAZARD WHEN EXPOSED TO HIGH TEMPERATURE OR IGNITION. TOXIC AND IRRITATING GASES/FUMES MAY BE GIVEN OFF DURING BURNING OR THERMAL DECOMPOSITION.
HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:.....	DECOMPOSITION PRODUCTS MAY INCLUDE THE FOLOWING MATERIALS: <ul style="list-style-type: none"> -CARBON DIOXIDE -CARBON MONOXIDE -NITROGEN OXIDES
CONDITIONS OF FLAMMABILITY:.....	NOT AVAILABLE
SENSITIVITY TO STATIC DISCHARGE:...	NOT APPLICABLE
SENSITIVITY TO IMPACT:.....	NOT APPLICABLE
Section 06: ACCIDENTAL RELEASE MEASURES	
LEAK/SPILL.....	STOP LEAK IF WITHOUT RISK. MOVE CONTAINERS FROM SPILL AREA. APPROACH FROM UPWIND. PREVENT ENTRY INTO SEWERS, WATER COURSES, BASEMENTS OR CONFINED AREAS. USE SPARK-PROOF TOOLS AND EXPLOSION-PROOF EQUIPMENT. CONTAMINATED ABSORBENT MATERIAL MAY POSE THE SAME HAZARD AS THE SPILLED PRODUCT. COVER SPILL WITH INERT MATERIAL AND COLLECT FOR PROPER DISPOSAL.

Section 07: HANDLING AND STORAGE	
STORAGE NEEDS.....	STORE IN ACCORDANCE WITH LOCAL REGULATIONS. STORE IN SEGREGATED AND APPROVED AREA. STORE IN ORIGINAL CONTAINER PROTECTED FROM DIRECT SUNLIGHT IN A DRY, COOL AND WELL-VENTILATED AREA, AWAY FROM INCOMPATIBLE MATERIALS AND FOOD AND DRINK.
ENGINEERING CONTROLS.....	VENTILATION – LOCAL (MECHANICAL IF USED INDOORS ON A CONTINUOUS BASIS).
HANDLING PROCEDURES AND EQUIPMENT.....	PUT ON APPROPRIATE PERSONAL PROTECTION EQUIPMENT. EATING, DRINKING AND SMOKING SHOULD BE PROHIBITED IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED AND PROCESSED. DO NOT REUSE CONTAINERS.
SYNERGISTIC MATERIALS.....	NONE KNOWN.
Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION	
GLOVES / TYPE.....	PERMEATION RESISTANT GLOVES.
RESPIRATORY / TYPE.....	NOISH APPROVED, AIR-PURIFYING ORGANIC VAPOR RESPIRATOR.
EYE / TYPE.....	WEAR SAFETY GLASSES WITH SIDE-SHIELDS.
FOOTWEAR / TYPE.....	NOT NORMALLY REQUIRED
OTHER / TYPE.....	WEAR CLOTH WORK CLOTHING INCLUDING LONG PANTS AND LONG-SLEEVED SHIRTS.
Section 09: PHYSICAL AND CHEMICAL PROPERTIES	
PHYSICAL STATE.....	LIQUID
APPEARANCE.....	COLOURLESS TO LIGHT YELLOW
ODOR.....	SLIGHT ALCOHOL
ODOR THRESHOLD.....	NOT AVAILABLE
BOILING POINT (°C) (CONC).....	>35°C(>95°F)
EVAPORATION RATE.....	NOT AVAILABLE
VAPOUR DENSITY (AIR=1).....	NOT AVAILABLE
SOLUBILITY IN WATER g/L (20°C)....	NOT AVAILABLE
VOLATILITY.....	NOT AVAILABLE
pH.....	NOT AVAILABLE
SPECIFIC GRAVITY (LIQUID).....	NOT AVAILABLE
DENSITY.....	0.96g/cm ³
FREEZING POINT: (°C).....	NOT AVAILABLE
AEROSOL PERCENT VOLATILE.....	N/A
(BY WEIGHT)	
PERCENT VOC (w/w).....	N/A

Section 10: STABILITY AND REACTIVITY			
HAZARDOUS PRODUCTS OF DECOMPOSITION.....	UNDER NORMAL CONDITIONS OF STORAGE AND USE, HAZARDOUS DECOMPOSITION PRODUCTS SHOULD NOT BE PRODUCED.		
POSSIBILITY OF HAZARDOUS REACTIONS.....	UNDER NORMAL CONDITIONS OF STORAGE AND USE, HAZARDOUS REACTIONS WILL NOT OCCUR.		
CHEMICAL STABILITY:.....	THE PRODUCT IS STABLE		
MATERIALS TO AVOID.....	REACTIVE OR INCOMPATIBLE WITH THE FOLLOWING MATERIALS: OXIDIZING MATERIALS		
CONDITIONS TO AVOID.....	ALL POSSIBLE SOURCES OF IGNITION (SPARK OR FLAME). DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE CONTAINERS TO HEAT OR SOURCES OF IGNITION.		
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 TOXICITY 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.		
EXTRAPOLATED ACUTE TOXICITY AND PRECAUTIONARY SIGNAL WORDS FOR (20% SPRAY-FORMULATION).....			
<u>STUDY TYPE</u>	<u>SPECIES</u>	<u>RESULTS</u>	<u>EU CLASSIFICATION</u>
ACUTE ORAL	RAT LD/50	MALE AND FEMALES = >5050 mg/kg	NOT CLASSIFIED
ACUTE DERMAL	RAT LD/50	MALE AND FEMALES = >5020 mg/kg	NOT CLASSIFIED
ACUTE INHALATION	RAT LC/50	>30.2 mg/L (4-hours)	NOT CLASSIFIED
EYE IRRITATION	RABBIT	NO EYE IRRITATION	NOT CLASSIFIED
SKIN IRRITATION	RABBIT	NO SKIN IRRITATION	NOT CLASSIFIED
DERMAL SENSITIZATION	GUINEA PIG	NON SENSITIZING	NOT CLASSIFIED
Section 12: ECOLOGICAL CONSIDERATIONS			
ENVIRONMENTAL.....	NOT AVAILABLE		
Section 13: DISPOSAL CONSIDERATIONS			
WASTE DISPOSAL.....	DISPOSE OF IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS. THE GENERATION OF WASTE SHOULD BE AVOIDED OR MINIMIZED WHEREVER POSSIBLE. EMPTY CONTAINERS OR LINERS MAY RETAIN SOME PRODUCT RESIDUES. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY.		

Section 14: TRANSPORTATION INFORMATION	
T.D.G. CLASSIFICATION.....	CONSUMER COMMODITY (UN1170, CLASS 3)
DOT CLASSIFICATION.....	CONSUMER COMMODITY, ORM-D.
Section 15: REGULATORY INFORMATION	
CANADIAN REGULATIONS:	
WHMIS CLASSIFICATION.....	CLASS B-2: FLAMMABLE LIQUID CLASS D-2B: MATERIAL CAUSING OTHER TOXIC EFFECTS
CEPA (Canadian Environmental Protection Act)	CONTAINS COMPONENTS NOT ON THE CANADIAN DSL.
U.S. REGULATIONS:	
HMIS RATING HEALTH.....	1 SLIGHT HAZARD
HMIS RATING FLAMMABILITY	3 HIGH HAZARD
HMIS RATING REACTIVITY	0 INSIGNIFICANT HAZARD
HMIS RATING PERSONAL PROTECTION	A.
SARA 313 INFORMATION.....	ACT OF 1986 AND OF 40 CFR 372. THIS PRODUCT CONTAINS NO INGREDIENTS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW
CALIFORNIA PROPOSITION 65	WARNING: THIS PRODUCT DOES NOT INTENTIONALLY CONTAIN ANY CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR OTHER REPRODUCTIVE HARM.
TSCA (Toxic Substances Control Act)	ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. ANY IMPURITIES PRESENT IN THIS PRODUCT ARE EXEMPT FROM LISTING.
Section 16: OTHER INFORMATION	
NOTICE FROM KUUS INC.	THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY KUUS INC. FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. KUUS INC. 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.
PREPARATION DATE.....	Dec 1, 2014