SAFETY DATA SHEET

1. Identification

Product identifier	MS0021 MOSQUITO SHIELI	D PIACTIVE KIDS INSECT REPELLENT
Other means of identification		
Product code	MS0021	
Recommended use	Insect Repellent	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier	/Distributor information	
Manufacturer		
Company name	KUUS INC.	
Address	450 TAPSCOTT ROAD	
	SCARBOROUGH, ON M1B 1	Y4
	Canada	
Telephone	General Assistance	1-416-298-7724
E-mail	Not available.	
Emergency phone number	Canutec	1-888-226-8832
		1-613-996-6666

2. Hazard(s) identification

Physical hazards Health hazards Label elements	Flammable liquids Not classified.	Category 2
Signal word	Danger	
Hazard statement	Highly flammable liquid and vapor.	
Precautionary statement		
Prevention	Keep container tightly closed. Ground and bor	quipment. Use non-sparking tools. Take action to
Response	IF ON SKIN (or hair): Take off immediately all case of fire: Use appropriate media to extingui	contaminated clothing. Rinse skin with water. In ish. (100% Icaridin)
Storage	Store in a well-ventilated place. Keep cool.	
Disposal	Dispose of contents/container in accordance v	with local/regional/national/international regulations.
Other hazards	None known.	
Supplemental information	None.	

3. Composition/information on ingredients

MixturesChemical nameCommon name and synonymsCAS number%1-piperidinecarboxylic Acid,
2-(2-hydroxyethyl)-2-methylpropyl
Ester119515-38-715 - 40Ethyl Alcohol64-17-515 - 40

Chemical name	Common name and synonyms	CAS number	%
Polyethylene Glycol		25322-68-3	10 - 30
Other components below report	able levels		15 - 40
All concentrations are in percent by	y weight unless ingredient is a gas. Gas concen	trations are in percent by vo	ume.
4. First-aid measures			
Inhalation	Move to fresh air. Call a physician if symptoms	s develop or persist.	
Skin contact	Take off immediately all contaminated clothing	g. Rinse skin with water/show	ver. (100% Icaridin)
Eye contact	Immediately flush eyes with plenty of water for present and easy to do.	r at least 15 minutes. Remov	e contact lenses, if
ngestion	Rinse mouth. Get medical attention if sympton	ns occur.	
Most important symptoms/effects, acute and delayed	Headache. Direct contact with eyes may cause temporary irritation. Coughing.		
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with wai immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.		
General information	Take off all contaminated clothing immediately	v. Wash contaminated clothin	ng before reuse.
5. Fire-fighting measures			
Suitable extinguishing media	Water fog. Alcohol resistant foam. Dry chemic	al powder.Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as thi	s will spread the fire.	
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. of ignition and flash back.	Vapors may travel considera	ble distance to a sou
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.		rn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes.		
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.		olved materials.
General fire hazards	Highly flammable liquid and vapor.		
6. Accidental release meas	sures		
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep peo ignition sources (no smoking, flares, sparks, o protective equipment and clothing during clear material unless wearing appropriate protective them. Local authorities should be advised if sig- protection, see section 8 of the SDS.	r flames in immediate area). n-up. Do not touch damaged clothing. Ventilate closed s	Wear appropriate containers or spilled baces before entering
Methods and materials for containment and cleaning up	Use water spray to reduce vapors or divert va smoking, flares, sparks, or flames in immediat away from spilled material. Take precautionar non-sparking tools.	e area). Keep combustibles	(wood, paper, oil, etc
	Large Spills: Stop the flow of material, if this is possible. Cover with plastic sheet to prevent s vermiculite, sand or earth to soak up the produc Following product recovery, flush area with wa	preading. Use a non-combu uct and place into a containe	stible material like
	Small Spills: Absorb with earth, sand or other for later disposal. Clean surface thoroughly to		
	Never return spills to original containers for re	-use. For waste disposal, se	e section 13 of the SI
Environmental precautions	Avoid discharge into drains, water courses or	-	
7. Handling and storage			
Precautions for safe handling	Do not handle, store or open near an open fla material from direct sunlight. When using do n	ot smoke. Explosion-proof g	eneral and local exha

material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Wear appropriate personal protective equipment.

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

US. ACGIH Threshold Limit Components	Туре	Value
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm
•	pational Health & Safety Code, Sche	
Components	Туре	Value
Ethyl Alcohol (CAS 64-17-5)	TWA	1880 mg/m3
		1000 ppm
Safety Regulation 296/97, as		for Chemical Substances, Occupational Health and
Components	Туре	Value
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm
	g. 217/2006, The Workplace Safety A	-
Components	Туре	Value
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm
•	trol of Exposure to Biological or Che	•
Components	Туре	Value
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm
Canada. Quebec OELs. (Min Components	istry of Labor - Regulation Respectir Type	ng the Quality of the Work Environment) Value
Ethyl Alcohol (CAS 64-17-5)	TWA	1880 mg/m3 1000 ppm
ological limit values	No biological exposure limits noted fo	r the ingredient(s).
propriate engineering ntrols	Explosion-proof general and local exh are recommended.	aust ventilation. Eye wash fountain and emergency shower
-	such as personal protective equipme	
Eye/face protection	Wear safety glasses with side shields	(or goggles).
Skin protection		
Hand protection	Wear appropriate chemical resistant of supplier.	gloves. Suitable gloves can be recommended by the glove
Other	Wear suitable protective clothing.	
Respiratory protection		n airborne concentrations below recommended exposure eptable level (in countries where exposure limits have not rator must be worn.
Thermal hazards	Wear appropriate thermal protective of	clothing, when necessary.
neral hygiene nsiderations	When using do not smoke.	
Physical and chemical p	properties	
pearance		
Physical state	Liquid.	

Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.

Initial boiling point and boiling range	212 °F (100 °C) estimated
Flash point	86.0 °F (30 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	756.46 °F (402.48 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous	Hazardous polymerization does not occur.

reactions	
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to i	nhalation are expected.	
Skin contact	No adverse effects due to s	skin contact are expected.	
Eye contact	Direct contact with eyes ma	ay cause temporary irritation.	
Ingestion	Expected to be a low inges	tion hazard.	
Symptoms related to the physical, chemical and toxicological characteristics	Headache. Coughing.		
Information on toxicological eff	ects		
Acute toxicity			
Components	Species	Test Results	
Ethyl Alcohol (CAS 64-17-5)			
Acute			
Inhalation			

Cat

LC50

85.41 mg/l, 4.5 Hours

Components	Species		Test Results
			43.68 mg/l, 6 Hours
	Mouse		> 60000 ppm
			79.43 mg/l, 134 Minutes
	Rat		> 115.9 mg/l, 4 Hours
			51.3 mg/l, 6 Hours
Oral			
LD50	Monkey		6000 mg/kg
	Mouse		10500 ml/kg
	Pig		> 5000 mg/kg
	Rat		10470 mg/kg
			7800 ml/kg
Polyethylene Glycol (CAS 25322	-68-3)		
<u>Acute</u>			
Oral			
LD50	Rat		4300 mg/kg
* Estimates for product may	be based on a	additional component data not shown.	
Skin corrosion/irritation		skin contact may cause temporary irrita	tion.
Serious eye damage/eye	-	tact with eyes may cause temporary irrit	
rritation			
Respiratory or skin sensitizatio	on		
Respiratory sensitization	-	Not a respiratory sensitizer.	
Skin sensitization	-	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity		No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity			
Canada - Manitoba OELs:	-	-	
ETHANOL (CAS 64-17-	,		carcinogen with unknown relevance to humans
Reproductive toxicity	-	ct is not expected to cause reproductive	e or developmental effects.
Specific target organ toxicity - single exposure	Not classif	ied.	
Specific target organ toxicity - repeated exposure	Not classif	ied.	
Aspiration hazard	Not an asp	piration hazard.	
12. Ecological informatio	n		
Ecotoxicity	The produ		azardous. However, this does not exclude the
Components	possibility	that large or frequent spills can have a f Species	narmful or damaging effect on the environment. Test Results
		Species	Test Results
Ethyl Alcohol (CAS 64-17-5)			
Aquatic Crustacea	EC50	Water flee (Depheie magne)	7700 11200 mg/l 48 hours
Fish	LC50	Water flea (Daphnia magna)	7700 - 11200 mg/l, 48 hours
		Fathead minnow (Pimephales pror	neias/ > 100.1 mg/l, 30 houis
Polyethylene Glycol (CAS 25 Aquatic	0322-68-3)		

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient	n-octanol / water (log Kow)
Ethyl Alcohol	-0.31
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal considerat	ions
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

	contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG	
UN number	UN1170
UN proper shipping name	Ethyl Alcohol (mixture)
Transport hazard class(es)	
Class	3
Subsidiary risk	
Packing group	III
Environmental hazards	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
UN number	UN1170
UN proper shipping name	Ethyl Alcohol (mixture)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	3H
Special precautions for user Other information	Read safety instructions, SDS and emergency procedures before handling.
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN1170
UN proper shipping name	Ethyl Alcohol (mixture)
Transport hazard class(es)	
Class	3
Subsidiary risk	
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-E, <u>S</u> - <u>E</u>
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.



15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable. Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Issue date	07-17-2019
Version #	03

	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Product and Company Identification: Alternate Trade Names