# SAFETY DATA SHEET

#### 1. Identification

Product identifier Other means of identification Product code	KD152DP KNOCK DOWN PR KILLER	O 152 RTU PEST CONTROL - HOME & AREA MULTI INSECT
Recommended use Recommended restrictions	KD152DP Pesticide None known.	
Manufacturer/Importer/Supplier/ Manufacturer	Distributor information	
Company name Address	KUUS INC. 450 TAPSCOTT ROAD SCARBOROUGH, ON M1B 1Y Canada	'4
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	Flammable liquids	Category 4
Health hazards	Sensitization, skin	Category 1
Label elements		
	$\land$	
	$\mathbf{V}$	
Signal word	None.	
Hazard statement	Combustible liquid. May cause an allergic skin	reaction.
Precautionary statement		
Prevention	Keep away from heat, hot surfaces, sparks, or Keep away from flames and hot surfaces-No s Contaminated work clothing should not be allo gloves/protective clothing/eye protection/face	wed out of the workplace. Wear protective
Response	IF ON SKIN: Wash with plenty of water. If skin advice/attention. Take off contaminated clothir appropriate media to extinguish.	irritation or rash occurs: Get medical ng and wash it before reuse. In case of fire: Use
Storage	Store in a well-ventilated place.	
Disposal	Dispose of contents/container in accordance w	vith local/regional/national/international regulations.
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1

	gioves/protective clothing/eye protection/lace	gioves/protective clothing/eye protection/race protection.	
Response	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.		
Storage	Store in a well-ventilated place.		
Disposal	Dispose of contents/container in accordance v	with local/regional/national/international regulations.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1	
	Hazardous to the aquatic environment, long-term hazard	Category 1	
Other hazards	None known.		

## 3. Composition/information on ingredients

None.

**Mixtures** 

Supplemental information

Chemical name	Common name and synonyms	CAS number	%
Permethrin		52645-53-1	0.1 - 1
			SDS CANADA

Chemical name	Common name and synonyms	CAS number	%
Solvent Naphtha (petroleum), Light Aromatic		64742-95-6	0.1 - 1
Tetramethrin		7696-12-0	0.1 - 1
Other components below reportable	levels		60 - 100

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures Inhalation Move to fresh air. Call a physician if symptoms develop or persist. Remove contaminated clothing immediately and wash skin with soap and water. In case of Skin contact eczema or other skin disorders: Seek medical attention and take along these instructions. Eve contact Rinse with water. Get medical attention if irritation develops and persists. Ingestion Rinse mouth. Get medical attention if symptoms occur. Most important Direct contact with eyes may cause temporary irritation. May cause an allergic skin reaction. Dermatitis. Rash. symptoms/effects, acute and delayed Provide general supportive measures and treat symptomatically. Keep victim under observation. Indication of immediate Symptoms may be delayed. medical attention and special treatment needed **General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. 5. Fire-fighting measures Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Suitable extinguishing media Unsuitable extinguishing Do not use water jet as an extinguisher, as this will spread the fire. media Specific hazards arising from The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. the chemical Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Special protective equipment and precautions for firefighters

**Fire fighting** In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do equipment/instructions so without risk. Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Combustible liquid.

## General fire hazards

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

7. Handling and storage	
Precautions for safe handling	Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. 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/perse	onal protection
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures,	such as personal protective equipment
Eye/face protection	Face shield is recommended. Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

### 9. Physical and chemical properties

Appearance	•
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	150.1 °F (65.6 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	23.01 psig @70F estimated
Vapor density	Not available.
Relative density	Not available.

Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Flammability class	Combustible IIIA estimated
Heat of combustion (NFPA 30B)	0.86 kJ/g estimated
Oxidizing properties	Not oxidizing.
Specific gravity	0.983 estimated
VOC (Weight %)	0.29 % estimated

## 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 reactions	Hazardous polymerization does not occur.
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 inhalation are expected.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

## Acute toxicity May

May cause an allergic skin reaction.

components	Species	Test Results
olvent Naphtha (petroleum	n), Light Aromatic (CAS 64742-95-6)	
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
LC50	Rat	> 5000 mg/m3, 4 Hours
		> 4980 mg/m3
		> 4980 mg/m3, 4 Hours
		> 4.96 mg/l, 4 Hours
Oral		
LD50	Rat	4820 mg/kg

Components	Species		Test Results	
Tetramethrin (CAS 7696-12-0)				
Acute				
Oral				
LD50	Rat		4640 mg/kg	
* Estimates for product may t	be based on a	dditional component data not shown.		
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.			
Serious eye damage/eye irritation	Direct conta	act with eyes may cause temporary irritatic	n.	
Respiratory or skin sensitizatio	n			
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.			
Skin sensitization	May cause	May cause an allergic skin reaction.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.			
Carcinogenicity				
IARC Monographs. Overall	Evaluation of	f Carcinogenicity		
Permethrin (CAS 52645-	-53-1)	3 Not classifiable as to	o carcinogenicity to humans.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.			
Specific target organ toxicity - single exposure	Not classified.			
Specific target organ toxicity - repeated exposure	Not classified.			
Aspiration hazard	Not an aspi	ration hazard.		
12. Ecological information	n			
Ecotoxicity	Very toxic to	o aquatic life with long lasting effects.		
Components		Species	Test Results	
Permethrin (CAS 52645-53-1	)			
Aquatic	5050		0.0000 0.0005 // 40.1	
Crustacea	EC50	Water flea (Daphnia magna)	0.0006 - 0.0025 mg/l, 48 hours	
Fish	LC50	Apache trout (Oncorhynchus gilae apache)	0.0013 - 0.0022 mg/l, 96 hours	
Tetramethrin (CAS 7696-12-0	D)			
Aquatic				
Fish	LC50	Carp (Cyprinus carpio)	0.095 - 0.16 mg/l, 96 hours	
* Estimates for product may b	be based on a	dditional component data not shown.		
Persistence and degradability	No data is a	available on the degradability of this produ	ct.	
Bioaccumulative potential				
Partition coefficient n-c	octanol / wate	r (log Kow)		
Permethrin Tetra methrin		6.5		
		4.73		
Tetramethrin	No data -	411-47-1163		
Mobility in soil	No data ava			
Mobility in soil	No other ad	lverse environmental effects (e.g. ozone d ndocrine disruption, global warming potent		
Mobility in soil Other adverse effects	No other ad potential, er	lverse environmental effects (e.g. ozone d		
Mobility in soil Other adverse effects 13. Disposal consideratio Disposal instructions	No other ad potential, er <b>ns</b> Collect and this materia with chemic local/region	Iverse environmental effects (e.g. ozone d ndocrine disruption, global warming potent reclaim or dispose in sealed containers at I to drain into sewers/water supplies. Do n cal or used container. Dispose of contents/ al/national/international regulations.	tial) are expected from this component. I licensed waste disposal site. Do not allow not contaminate ponds, waterways or ditches container in accordance with	
Mobility in soil Other adverse effects 13. Disposal consideratio	No other ad potential, er <b>ns</b> Collect and this materia with chemic local/region Dispose in a	Iverse environmental effects (e.g. ozone d indocrine disruption, global warming potent reclaim or dispose in sealed containers at il to drain into sewers/water supplies. Do n cal or used container. Dispose of contents/ al/national/international regulations. accordance with all applicable regulations.	tial) are expected from this component. I licensed waste disposal site. Do not allow not contaminate ponds, waterways or ditches container in accordance with	

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	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	
Environmental hazards	Marine pollutant only when containing 10% or more substances identified as marine pollutants or severe marine pollutant when containing 1% or more substances identified as severe marine pollutants
Special precautions for user	r Read safety instructions, SDS and emergency procedures before handling.
IATA	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Hexyl cinnamal, Benzyl benzoate)
Transport hazard class(es)	
Class	9
Subsidiary risk	
Label(s)	9
Packing group	
Environmental hazards	Yes
ERG Code	9L
	r Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed with restrictions.

aircraft Allowed with restriction nh . .ft

#### IN

Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexyl cinnamal, Benzyl benzoate)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
Special precautions for user	r Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and	Not established.

Aı the IBC Code

#### IATA; IMDG; TDG



Marine pollutant



IMDG Regulated Marine Pollutant.

#### 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)	No
New Zealand	New Zealand Inventory	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto	Rico Toxic Substances Control Act (TSCA) Inventory	No
	components of this product comply with the inventory requirements administered by the product are not listed or exempt from listing on the inventor	
16. Other Information		
Issue date	06-06-2019	
Version #	02	
Disclaimer	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 not to be considered a warranty or quality specification. The information relates only to the spe material designated and may not be valid for such material used in combination with any other	

**Revision information** 

Product and Company Identification: Alternate Trade Names

materials or in any process, unless specified in the text.