SAFETY DATA SHEET

1. Identification

Product identifier KD150D KNOCK DOWN IN-AND-AROUND THE HOUSE INSECT KILLER

Other means of identification

Product code KD150D

Recommended use Pesticide

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name KUUS INC.

Address 450 TAPSCOTT ROAD

SCARBOROUGH, ON M1B 1Y4

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 hazardsFlammable liquidsCategory 4Health hazardsSensitization, skinCategory 1

Label elements



Signal word None.

Hazard statement Combustible liquid. May cause an allergic skin reaction.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from flames and hot surfaces-No smoking. Avoid breathing mist or vapor. Contaminated work clothing should not be allowed out of the workplace. Wear protective

gloves/protective clothing/eye protection/face 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 with local/regional/national/international regulations.

Environmental hazards Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

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

Chemical name	Common name and synonyms	CAS number	%
Solvent Naphtha (petroleum), Ligi Aromatic	ht	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 symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

General information

Direct contact with eyes may cause temporary irritation. May cause an allergic skin reaction. Dermatitis, Rash.

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Special protective equipment

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.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. and precautions for firefighters

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Combustible liquid.

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.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

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

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/personal 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

Face shield is recommended. Wear safety glasses with side shields (or goggles). Eye/face protection

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Other

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. Liquid. **Form** Not available. Color Odor Not available. **Odor threshold** Not available. Not available.

Melting point/freezing point Initial boiling point and boiling

212 °F (100 °C) estimated

range

Ha

150.1 °F (65.6 °C) estimated Flash point

Not available. **Evaporation rate** Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Not available.

(%)

Flammability limit - upper

(%)

Not available.

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

23.01 psig @70F estimated Vapor pressure

Vapor density Not available. Relative density Not available. Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot 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

ReactivityThe 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 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 cause an allergic skin reaction.

Components Species Test Results

Solvent Naphtha (petroleum), Light Aromatic (CAS 64742-95-6)

<u>Acute</u> 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

Test Results Components **Species**

Tetramethrin (CAS 7696-12-0)

Acute Oral

LD50 Rat 4640 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Permethrin (CAS 52645-53-1) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

Not classified.

single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Permethrin (CAS 526	645-53-1)		
Aquatic			
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 76	696-12-0)		
Fish	LC50	Carp (Cyprinus carpio)	0.095 - 0.16 mg/l, 96 hours

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Permethrin 6.5 Tetramethrin 4.73

No data available. Mobility in soil

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 considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow **Disposal instructions**

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Dispose in accordance with all applicable regulations. Local disposal regulations

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

^{*} Estimates for product may be based on additional component data not shown.

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)

9 **Class** Subsidiary risk Ш 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 Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN3082

UN proper shipping name

Transport hazard class(es)

Environmentally hazardous substance, liquid, n.o.s. (Hexyl cinnamal, Benzyl benzoate)

Class 9 Subsidiary risk Label(s) 9 Packing group Ш **Environmental hazards** Yes **ERG Code** 9L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

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 Ш

Environmental hazards

Marine pollutant Yes F-A. S-F **EmS**

Special precautions for user 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

the IBC Code

Not established.

IATA; IMDG; TDG



Marine pollutant



General information

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)

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 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 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