SAFETY DATA SHEET

1. Identification

Product identifier KD100P KNOCK DOWN PROFESSIONAL CRAWLING INSECT KILLER

Other means of identification

Product code KD100P
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 hazards

Health hazards Flammable aerosols Category 1

Sensitization, skin Category 1

Label elements Aspiration hazard Category 1



Signal word Danger

Hazard statement Extremely flammable aerosol. May be fatal if swallowed and enters airways. May cause an allergic

skin reaction.

Precautionary statement

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

Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing gas. Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

Response IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. 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.

Storage Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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	%
Isobutane		75-28-5	15 - 40
Naphtha (Petroleum), Hydrotreated Heavy	3	64742-48-9	5 - 10
Propane		74-98-6	3 - 7
Distillates (petroleum), Hydrotreated Light		64742-47-8	1 - 5
White Mineral Oil		8042-47-5	1 - 5
Permethrin		52645-53-1	0.1 - 1
Other components below reportabl	e levels		40 - 70

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.

Skin contact In case of eczema or other skin disorders: Seek medical attention and take along these

instructions.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important

General information

symptoms/effects, acute and

delayed

Aspiration may cause pulmonary edema and pneumonitis. May cause an allergic skin reaction. Dermatitis, Rash.

Indication of immediate medical attention and special

treatment needed

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

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Not available.

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

protect themselves. Wash contaminated clothing before reuse.

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

General fire hazards

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

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

containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

Extremely flammable aerosol.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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 Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. 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

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

US. ACGIF	Threshold	Limit Values
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Components	туре	value		
Isobutane (CAS 75-28-5)	STEL	1000 ppm		
Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)				
Components	Туре	Value		
Propane (CAS 74-98-6)	TWA	1000 ppm		

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Туре	Value	Form	
Distillates (petroleum),	TWA	200 mg/m3	Non-aerosol.	
Hydrotreated Light (CAS				

64742-47-8)

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Туре	Value
Isobutane (CAS 75-28-5)	STEL	1000 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) Components Type Value

Isobutane (CAS 75-28-5)	TWA	800 ppm
Canada, Quebec OELs, (Ministry of Labor	- Regulation Respecting the Qualit	v of the Work Envir

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)			
Components	Туре	Value	

No biological exposure limits noted for the ingredient(s).

Propane (CAS 74-98-6) TWA 1800 mg/m3 1000 ppm

Biological limit values Exposure guidelines

Canada - British Columbia OELs: Skin designation

64742-47-8)

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 permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an

air-supplied respirator.

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

Gas. Physical state Aerosol. **Form** Color Not available. Odor Not available. Not available. **Odor threshold** Not available. Melting point/freezing point Not available.

Initial boiling point and boiling

range

149.18 °F (65.1 °C) estimated

-99.4 °F (-73.0 °C) PROPELLANT estimated Flash point

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

Flammability limit - lower

(%)

1.2 % estimated

Flammability limit - upper

9.3 % estimated

Not available. **Explosive limit - lower (%)** Explosive limit - upper (%) Not available. Not available. Vapor pressure Not available. Vapor density Not available. Relative density

Solubility(ies)

Solubility (water) Not available. Partition coefficient Not available.

(n-octanol/water)

720.14 °F (382.3 °C) estimated **Auto-ignition temperature**

Not available. **Decomposition temperature** Not available. **Viscosity**

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing. Specific gravity 0.844 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 Hazardous polymerization does not occur. reactions

Conditions to avoid

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Nitrates. Fluorine. Chlorine. 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 Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. May cause an allergic skin reaction.

Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. May cause an allergic skin reaction.

Components Species Test Results

Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg

> 2000 mg/kg, 24 Hours

Inhalation

LC50 Rat

> 7.5 mg/l, 6 Hours > 4.6 mg/l, 4 Hours

Oral

LD50 Rat > 5000 mg/kg

Isobutane (CAS 75-28-5)

Acute

Inhalation

LC50 Mouse 1237 mg/l, 120 Minutes

52 %, 120 Minutes

Rat 1355 mg/l

Naphtha (Petroleum), Hydrotreated Heavy (CAS 64742-48-9)

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

Propane (CAS 74-98-6)

<u>Acute</u>

Inhalation

LC50 Mouse 1237 mg/l, 120 Minutes

52 %, 120 Minutes

Rat 1355 mg/l

658 mg/l/4h

Components Species Test Results

White Mineral Oil (CAS 8042-47-5)

Acute Dermal

LD50 Rabbit > 2000 mg/kg, 24 Hours

Inhalation

LC50 Rat 2.18 mg/l, 4 Hours

Oral

LD50 Rat > 5000 mg/kg

5000.0001 mg/kg

Skin corrosion/irritationProlonged skin contact may cause temporary irritation. **Serious eye damage/eye**Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

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

Reproductive toxicityThis 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 May be fatal if swallowed and enters airways.

Chronic effects Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Distillates (petroleum)	, Hydrotreated Ligh	t (CAS 64742-47-8)	
Aquatic			
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
Permethrin (CAS 5264	45-53-1)		
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
White Mineral Oil (CA	S 8042-47-5)		
Aquatic			
Fish	LC50	Fish	10000.0001, 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)

Isobutane 2.76
Permethrin 6.5
Propane 2.36

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

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 considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. Do not allow 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.

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:

Dionacal instructions)

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. Do not re-use empty containers.

14. Transport information

TDG

UN number UN1950

UN proper shipping name AEROSOLS, flammable

Transport hazard class(es)

Class 2.1 Subsidiary risk -

Packing group Not applicable.

Environmental hazards

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

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

Environmental hazards Yes **ERG Code** 10L

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

Cargo aircraft only

aircraft

Allowed with restrictions.

Allowed with restrictions.

IMDG

UN number UN1950 UN proper shipping name AEROSOLS

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) None

Packing group Not applicable.

Environmental hazards

Marine pollutant Yes
EmS F-D. S-U

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 applicable.

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)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (FINECS)	No

Country(s) or region Inventory name On inventory (yes/no)* Europe European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Japan No Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes **Philippines** Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS)

Toxic Substances Control Act (TSCA) Inventory

Yes

*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 06-04-2019

Version # 02

United States & Puerto Rico

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

Hazard(s) identification: Hazard statement

Hazard(s) identification: Response Hazard(s) identification: Storage Hazard(s) identification: GHS Symbols

Composition / Information on Ingredients: Component Summary

First-aid measures: Most important symptoms/effects, acute and delayed

Handling and storage: Precautions for safe handling

Handling and storage: Conditions for safe storage, including any incompatibilities

Toxicological information: Acute toxicity Toxicological information: Aspiration hazard Toxicological information: Ingestion

Toxicological information: Symptoms related to the physical, chemical and toxicological

characteristics GHS: Classification