Safety Data Sheet

ISK BIOCIDES, INC.

Preparation Date 01-June-2015 Revision date February 2, 2016

1. Identification of the Substance/Preparation and of the Company/Undertaking

<u>Product identifier</u> X-Lance[®]

Product Description: Insecticide Concentrate

Other means of identification

SDS#: ISK067
Synonyms Not Available
Registration number(s) 1022-587-71581

Recommended use of the chemical and restrictions on use

Recommended use Insecticide. termiticide.

Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Supplier Address 416 East Brooks Road

Memphis, Tennessee 38109

Contact Person: Anthony Accampo or Gail Watson

Email: SDSInquiry@iskbiocides.com

Emergency telephone number

Company Phone Number 1-800-248-7961

Emergency telephone number Chemtrec: (800) 424-9300

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration toxicity	Category 1

Label elements

EMERCENCY OVERVIEW

DANGER

Hazard Statements

May cause an allergic skin reaction

May cause genetic defects

May cause cancer

May be fatal if swallowed and enters airways







Appearance amberPhysical state liquidOdor Mild Petroleum

Precautionary Statements - Prevention

Do not handle until all safety precautions have been read and understood Do not handle until all safety precautions have been read and understood Wear cold insulating gloves/face shield/eye protection Do not get in eyes, on skin, or on clothing Contaminated work clothing should not be allowed out of the workplace Wear protective gloves

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Precautionary Statements - Storage

Store in original container in a cool, dry, ventilated place out of the reach of children and away from food, drink and animal feeding stuffs.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Permethrin technical	52645-53-1	36.8	
Hydrocarbon solvent	Proprietary	>15	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

	measur	

FIRST AID MEASURES

Eye contact Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact

lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or

doctor for treatment advice.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing before re-use. Call poison control center or doctor for treatment

advice.

Inhalation Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give

artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison

control center immediately

Ingestion Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Call a physician or poison control center immediately.

Protection of First-aidersUse personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and

Effects

No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically. Treatment should include monitoring for the development of

hypersensitivity reactions with respiratory distress. For paresthesia, Vitamin E topical

application is highly effective.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO2). Water. Foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products Carbon dioxide (CO2). Chlorine. Hydrogen chloride.

Explosion data

Protective equipment and precautions for firefighters

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Provide adequate ventilation, Avoid contact with the skin and the eves, Remove all sources

of ignition. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after

handling.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Consult a regulatory specialist to

determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in

pertinenet environmental permits.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Ground and bond containers when transferring material. Sweep up and shovel

into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handling Do not eat, drink or smoke when using this product. Remove all sources of ignition. Avoid

contact with skin and eyes. Keep away from open flames, hot surfaces and sources of

ignition. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep away from open

flames, hot surfaces and sources of ignition. Keep out of the reach of children. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

Static electricity may accumulate when transferring material.

incompatible materials Strong oxidizing agents.

8. Exposure Controls/Personal Protection

Exposure guidelines

Che	mical name	ACGIH TLV	OSHA PEL
Hydro	carbon solvent	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³
			(vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³

Engineering controls

Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection

Skin protection Respiratory protection

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Goggles. If splashes are likely to occur, wear. Face-shield. Wear protective gloves/clothing. Chemical resistant footwear plus socks.

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection

programs must comply with 29 CFR 1910.134.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state liquid appearance translucent color amber Odor Mild Petroleum

Property VALUES Remarks/Method

pН 4.9 5.9 °C / 43 °F Melting point/freezing point **Boiling Point/Range**

No information available

Flash Point 44 C 111 °F

Evaporation Rate No information available Flammability (solid, gas) No information available Flammability limit in air

Upper Flammability Limit No information available

Lower Flammability Limit No information available

vapor pressure No information available

Vapor Density No information available

Specific gravity 1.039 @ 20 C

Water solubility No information available Solubility in Other Solvents No information available Partition coefficient: n-octanol/waterNo information available **Autoignition temperature** No information available decomposition temperature No information available Viscosity, kinematic No information available Dynamic viscosity No information available **Explosive properties** No information available **Oxidizing properties** No information available

OTHER INFORMATION

Softening point No information available

molecular weight 1.039 @ 20 C

VOC Content

147 g/L 1.23 lbs/gal 14.0%
density

No information available

Bulk density

No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization Hazardous polymerisation does not occur.

Conditions to avoid

Heat, flames and sparks. incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

Inhalation HARMFUL IF INHALED.

Eye contact Moderately irritating to the eyes.

Skin contact May be harmful if absorbed through the skin.

Ingestion HARMFUL IF SWALLOWED.

Component Information Permethrin - has low mammalian toxicity and virtually no allergic side effects and is not a

skin or eye irritant. However, prolonged exposure might result in parathesia (tingling sensation), which is reversible within 12 hours. Exposure to permethrin is via dermal contact and inhalation. In repeat patch tests in humans, dermal applications of permethrin at 1% for up to 9 days did not result in irritation or sensitization. The clinical manifestations of inhalation exposure are confined to the upper respiratory tract and include rhinitis,

sneezing, cough, and scratchy throat.

Hydrocarbon solvent (Stoddard) - Exposure via inhalation or dermal contact. Humans exposed for 30 minutes to up to 2,400 mg/m³ of completely vaporized Stoddard solvent had no dose related changes in motor coordination and the exposure level of 2,400 mg/m³ was

considered as the no observed effect level. In a 15 minute period, eye irritation,

characterized as a slight dryness, was reported in one of six volunteers at 150 ppm. At 470 ppm (2,700 mg.m3), ocular irritation was reported by all six volunteers. Exposure greater than 525 mg/m³ have been associated with ocular and dermal irritation, defatting of the skin, and nausea. Acute effects from inhaling large concentrations of Stoddard solvent has been associated with headaches, fatigue, intermittent episodes of inebriation, and memory deficits that generally resolve on discontinuation of exposure. Ingestion of petroleum hydrocarbons are poorly absorbed from the gastrointestinal tract, and do not cause appreciable systemic toxicity by this route unless aspiration has occurred.

Chemical name	mical name LD50 Oral LD50 Dermal		LC50 Inhalation	
Hydrocarbon solvent	500	-	-	

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available. **Mutagenic effects**No information available.

Carcinogenicity The information below indicates whether any agency has listed any ingredient as a

carcinogen.

 Chemical name
 ACGIH
 IARC
 NTP
 OSHA

 Permethrin technical
 Group 3

 52645-53-1

Reproductive effects Not Available.

STOT - Single Exposure No information available. STOT - repeated exposure No information available.

Target organ effects kidney, Respiratory System, EYES, skin, Central Nervous System (CNS).

Aspiration hazard No information available.

Numerical Measures of Toxicity - No information available

The following values are calculated based on chapter 3.1 of the GHS document. 777 mg/kg (rat) 0 mg/kg (rat) 0 mg/l (mist) (dust) mg/m³ 0 ml/m³ (Vapor)

12. Ecological Information

Marine Pollutant. (Permethrin).

ecotoxicity

Permethrin in soil is stable over a wide range of pH values when applied at agricultural use rates. Permethrin has moderate rate of degradation in soil. At termicidal use rates, permethrin degrades at a slower rate which is governed by soil characteristics such as soil type, microbial population concentration in soil and aerobic conditions of the soil. Due to its high affinity for organic matter, there is little potential for movement in soil or entry into ground water. Permethrin has a low Pow of 6.1 but a low potential to bioconcentrate (BCF=500) due to the ease with which it is metabolized.

Extrememly toxic to fish = 0.05 ug/L to 315 ug/L

Extremely toxic to aquatic arthropods LC50 = 0.02 ug/L to 7.6 ug/L

Marine species are often more sensitive than freshwater species. Bacteria, algae, mollusks and amphibians are much more tolerant of permethrin than the fish and arthropods. Care should be taken to avoid contamination of the aquatic environment. Permethrin is slightly toxic to birds and oral LD50 values are greater than 3,600 mg/kg. Longer dietary studies showed that concentrations of up to 500 ppm in the diet had no effect on bird reproduction. Permethrin is extremely toxic to fish, aquatic invertebrates and honey bees.

rainbow trout 96 hr LC50 = 2.5 ug/L Bluegill sunfish 95 hr LC50 = 1.8 ug/L Japanese quail LD50 = 23,000 mg/kg Mallard duck LD50 = 11,257 mg/kg

Persistence/Degradability

No information available.

PAGE 6/9

Bioaccumulation/Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Permethrin technical	6.5
52645-53-1	

Other Adverse Effects

No information available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is

a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated packaging Refer to product label.

14. Transport Information

DOT

Not regulated under DOT

ICAO

UN-No UN1993

Proper shipping name Flammable liquid, n.o.s (hydrocarbon solvent)

Hazard class 3

Packing group PG III

Description Marine Pollutant (Permethrin)

<u>IATA</u>

UN-No UN1993

Proper shipping name Flammable liquid, n.o.s (hydrocarbon)

Hazard class 3

Packing group PG III

IMDG/IMO

UN-No UN1993

Proper shipping name Flammable liquid, n.o.s (hydrocarbon)

Hazard class 3

Packing group PG III
EmS No. F-E, S-E
Marine Pollutant Marine Pollutant

PAGE 7/9

15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Signal word CAUTION

Ventilation Control PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO

PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA

WORKER PROTECTION STANDARD 40 CFR PART 170.

Harmful if inhaled or absorbed through skin. Harmful if swallowed. Keep out of Reach of Children. Causes moderate eye irritation. Extremely toxic to aquatic organisms including fish and invertebrates.

International Inventories

USINV Not determined
DSL/NDSL Not determined
EINECS/ Does not comply

ELINCS

ENCS Does not comply
China Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply

TSCA Exempt

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
Permethrin technical - 52645-53-1	1.0
SARA 311/312 Hazardous	

SARA 311/312 Hazardous

Categorization

Acute health hazard YES
Chronic health hazard NO
Fire hazard YES
Sudden release of pressure hazard NO
Reactive Hazard YES

CERCLA

SARA Product RQ 0

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
		Ingredients		

Permethrin technical		X	
52645-53-1 (36.8)			

State Regulations

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Permethrin technical	X	X		X	
Hydrocarbon solvent	X	X	X		

International regulations
U.S. EPA Label information
EPA Pesticide registration number 1022-587-71581

16. Other Information

NFPA 2 **HEALTH** 3 **Flammability** Instability 1 Physical hazard -

Preparation Date 01-June-2015 Revision date 02 February 2016

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