



Fireback[®] Bed Bug & Insect Spray & Jet Safety Data Sheet

Issue Date: 22-Apr-2022

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Version 1

1. IDENTIFICATION

Product identifier

Product Name Fireback Bed Bug & Insect Spray & Jet

Other means of identification

SDS # NIS-046

Registration Number(s) EPA Reg. No. 1021-2707-64405
UN/ID No UN1950

Recommended use of the chemical and restrictions on use

Recommended Use A liquified aerosol insecticide spray.

Details of the supplier of the safety data sheet

Manufacturer Address

Nisus Corporation
100 Nisus Drive
Rockford, TN 37853

Emergency telephone number

Company Phone Number Phone: (800)-264-0870
Fax: (865) 577-5825
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Emergency Overview This product is registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-EPA registered chemicals. See Section 15 for EPA information.

Appearance Milky white liquified gas

Physical state Gas

Odor Mild

Classification

Skin sensitization	Category 1
Aspiration toxicity	Category 1
Gases under pressure	Liquefied gas

Signal Word

Danger

Hazard statements

May cause an allergic skin reaction
May be fatal if swallowed and enters airways
Contains gas under pressure; may explode if heated

**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing must not be allowed out of the workplace
 Wear protective gloves

Precautionary Statements - Response

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

Precautionary Statements - Storage

Store locked up
 Protect from sunlight. Store in a well-ventilated place

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Petroleum Distillates, Hydrotreated light	64742-47-8	10-15
Isobutane	75-28-5	10-15
Propane	74-98-6	1-5
Permethrin	52645-53-1	0.2
Pyrethrins	8003-34-7	0.1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air.
Ingestion	Immediately call a poison center or doctor/physician. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause an allergic skin reaction. May be fatal if swallowed and enters airways.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Not determined.

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

Protective equipment and precautions for firefighters

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 Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.

Environmental precautions

Environmental precautions If spilled, prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Protect from sunlight. Store in a well-ventilated place.

Incompatible Materials Strong acids. Strong bases. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isobutane 75-28-5	STEL: 1000 ppm explosion hazard	-	TWA: 800 ppm TWA: 1900 mg/m ³
Propane 74-98-6	: See Appendix F: Minimal Oxygen Content, explosion hazard	TWA: 1000 ppm TWA: 1800 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m ³
Pyrethrins 8003-34-7	TWA: 5 mg/m ³	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³	IDLH: 5000 mg/m ³ TWA: 5 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Gas	Odor	Mild
Appearance	Milky white liquified gas	Odor Threshold	Not determined
Color	Milky white		
Property	Values	Remarks • Method	
pH	5-7		
Melting point / freezing point	Not determined		
Boiling point / boiling range	Not determined		
Flash point	>93.3 °C / >200 °F		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Not determined		
Flammability Limit in Air			
Upper flammability or explosive limits	Not determined		
Lower flammability or explosive limits	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Relative Density	Not determined		
Water Solubility	Not determined		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Autoignition temperature	Not determined		
Decomposition temperature	Not determined		
Kinematic viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition productsHydrogen chloride. Carbon monoxide. Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information****Eye Contact** Avoid contact with eyes.**Skin Contact** Avoid contact with skin.**Inhalation** Do not inhale.**Ingestion** Do not ingest.**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isobutane 75-28-5	-	-	= 658 mg/L (Rat) 4 h
Petroleum Distillates, Hydrotreated light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Propane 74-98-6	-	-	> 800000 ppm (Rat) 15 min
Piperonyl butoxide 51-03-6	= 4570 mg/kg (Rat)	= 1880 mg/kg (Rabbit)	> 5.9 mg/L (Rat) 4 h
Permethrin 52645-53-1	= 220 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 0.69 mg/L (Rat) 4 h
Pyrethrins 8003-34-7	= 200 mg/kg (Rat)	= 2060 mg/kg (Rabbit)	= 3.4 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics**Symptoms** Please see section 4 of this SDS for symptoms.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** May cause an allergic skin reaction.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical name	ACGIH	IARC	NTP	OSHA
Piperonyl butoxide 51-03-6		Group 3		
Permethrin 52645-53-1		Group 3		X
Pyrethrins 8003-34-7		Group 2A		X

Legend

IARC (International Agency for Research on Cancer)
 Group 2A - Probably Carcinogenic to Humans
 Group 3 IARC components are "not classifiable as human carcinogens"
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present

Aspiration hazard

May be fatal if swallowed and enters airways.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 33,366.6667 mg/kg
Dermal LD50 13,346.70 mg/kg
Gas 1,263,198.10 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Petroleum Distillates, Hydrotreated light 64742-47-8		2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through	
Piperonyl butoxide 51-03-6		7.07: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	
Permethrin 52645-53-1		0.00049 - 0.00097: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.001 - 0.009: 96 h Pimephales promelas mg/L LC50 static 0.0017 - 0.0048: 96 h Oncorhynchus mykiss mg/L LC50 static 0.00188 - 0.00336: 96 h Lepomis macrochirus mg/L LC50 static 0.0052 - 0.0077: 96 h Cyprinus carpio mg/L LC50 0.008 - 0.03: 96 h Pimephales promelas mg/L LC50 flow-through 0.00079: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.0108: 96 h Lepomis macrochirus mg/L LC50 0.015: 96 h Cyprinus carpio mg/L LC50 flow-through	

Chemical name	Algae/aquatic plants	Fish	Crustacea
Pyrethrins 8003-34-7		0.054: 96 h Oncorhynchus mykiss mg/L LC50 0.0031 - 0.0038: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.02 - 0.03: 96 h Oncorhynchus mykiss mg/L LC50 static 0.0322 - 0.0472: 96 h Lepomis macrochirus mg/L LC50 static 0.003 - 0.0046: 96 h Lepomis macrochirus mg/L LC50 flow- through 0.074: 96 h Lepomis macrochirus mg/L LC50 0.0425 - 0.121: 96 h Pimephales promelas mg/L LC50 flow-through 0.224 - 0.458: 96 h Pimephales promelas mg/L LC50 static	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Isobutane 75-28-5	2.88
Propane 74-98-6	2.3
Permethrin 52645-53-1	6.5

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Permethrin 52645-53-1	Toxic
Pyrethrins 8003-34-7	Toxic

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1950
 Proper Shipping Name Aerosols
 Hazard class 2.2

IATA

UN number UN1950
 Proper Shipping Name Aerosols, non-flammable
 Transport hazard class(es) 2.2

IMDG

UN number UN1950
 Proper Shipping Name Aerosols
 Transport hazard class(es) 2.2
 Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Isobutane	X	ACTIVE	X	X	X	X	X	X	X
Petroleum Distillates, Hydrotreated light	X	ACTIVE	X	X		X	X	X	X
Propane	X	ACTIVE	X	X	X	X	X	X	X
Piperonyl butoxide	X	ACTIVE	X	X	X	X	X	X	X
Permethrin	X			X	X	X	X	X	X
Pyrethrins	X		X	X		X	X	X	X

Legend:

- 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 Chemical Substances/European 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*

US Federal Regulations

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Pyrethrins 8003-34-7	1 lb		RQ 1 lb final RQ RQ 0.454 kg final RQ

SARA 311/312 Hazard Categories

Acute Health Hazard No
 Chronic Health Hazard Yes
 Fire Hazard No
 Sudden Release of Pressure Hazard Yes
 Reactive Hazard No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Pyrethrins	1 lb			

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Isobutane 75-28-5	X	X	X
Propane 74-98-6	X	X	X
Piperonyl butoxide 51-03-6	X		
Permethrin 52645-53-1	X	X	
Pyrethrins 8003-34-7	X	X	X

EPA Pesticide Registration Number EPA Reg. No. 1021-2707-64405

EPA Statement

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:

EPA Pesticide Label

Please refer to EPA label for additional information

Difference between SDS and EPA pesticide label

Please refer to EPA label for additional information

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 2	Flammability 4	Instability 0	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 1*	Flammability 4	Physical hazards 0	Personal Protection Not determined

Chronic Hazard Star Legend * = Chronic Health Hazard

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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.



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