

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



Raid Bed Bug Foaming Spray (EPA Reg. No. 1021-2780-4822)

Version 1.1

Print Date 09/04/2018

Revision Date 06/01/2018

SDS Number 350000034224

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : Raid Bed Bug Foaming Spray (EPA Reg. No. 1021-2780-4822)

Recommended use : Insecticide

Restrictions on use : Use only as directed on label

Manufacturer, importer, supplier : S.C. Johnson & Son, Inc.
1525 Howe Street
Racine WI 53403-2236

Telephone : +1-800-558-5252

Emergency telephone number : 24 Hour Medical Emergency Phone: (866)231-5406
24 Hour International Emergency Phone: (703)527-3887
24 Hour Transport Emergency Phone: (800)424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Globally Harmonized System (GHS) Classification

Hazard classification	Hazard category	Hazards identification
Aerosol	Category 2	Flammable aerosol.
Acute toxicity	Category 4	Harmful if inhaled.
Gases under pressure	Compressed gas	Contains gas under pressure; may explode if heated.

Labelling

Hazard symbols

Flame
Gas cylinder
Exclamation mark

Signal word

Warning

Hazard statements

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Flammable aerosol.
Contains gas under pressure; may explode if heated.
Harmful if inhaled.

Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Store in a well-ventilated place.
Dispose of contents/ container to an approved incineration plant.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Avoid breathing spray.
Use only outdoors or in a well-ventilated area.

Other hazards : Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.
Excessive exposure to spray mist, fog or vapour may cause respiratory irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Weight percent
Isobutane	75-28-5	5.00 - 10.00
Propane	74-98-6	1.00 - 5.00
Piperonyl butoxide	51-03-6	1.00 - 5.00
Metofluthrin	240494-70-6	0.0001 - 0.10

The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

For additional information on product ingredients, see www.whatsinsidescjohnson.com.

4. FIRST AID MEASURES

Description of first aid measures

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- Eye contact** : No special requirements
- Skin contact** : No special requirements
- Inhalation** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- Ingestion** : No special requirements

Most important symptoms and effects, both acute and delayed

- Eyes** : May irritate eyes.
- Skin effect** : No adverse effects expected when used as directed.
- Inhalation** : Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal. Excessive exposure to spray mist, fog or vapour may cause respiratory irritation.
- Ingestion** : No adverse effects expected when used as directed.

Indication of any immediate medical attention and special treatment needed

See Description of first aid measures unless otherwise stated.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Specific hazards during firefighting** : Aerosol Product - Containers may rocket or explode in heat of fire. Do not allow run-off from fire fighting to enter drains or water courses.
- Further information** : Fight fire from maximum distance or protected area. Cool and use caution when approaching or handling fire-exposed containers. Wear full protective clothing and positive pressure self-contained breathing apparatus. In case of fire and/or

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explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

- | | | |
|--|---|---|
| Personal precautions | : | Remove all sources of ignition.
Wear personal protective equipment.
Wash thoroughly after handling. |
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system.
Use appropriate containment to avoid environmental contamination.
Outside of normal use, avoid release to the environment. |
| Methods and materials for containment and cleaning up | : | If damage occurs to aerosol can:
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Use only non-sparking equipment.
Dike large spills.
Clean residue from spill site. |

7. HANDLING AND STORAGE

- | | |
|--|--|
| Handling | |
| Precautions for safe handling | : |
| | Avoid contact with skin, eyes and clothing.
Do not enter places where used or stored until adequately ventilated.
For personal protection see section 8.
Use only as directed.
KEEP OUT OF REACH OF CHILDREN AND PETS.
Avoid breathing vapours, mist or gas.
Pressurized container.
Do not pierce or burn, even after use.
Use only outdoors or in a well-ventilated area. |
| Advice on protection against fire and explosion | : |
| | Keep away from sources of ignition - No smoking.
Do not spray on an open flame or other ignition source. |

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Storage

Requirements for storage areas and containers : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Keep away from food, drink and animal feedingsuffs.
Keep in a dry, cool and well-ventilated place.

Other data : Stable under recommended storage conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m3	ppm	Non-standard units	Basis
Isobutane	75-28-5	-	1,000 ppm	-	ACGIH STEL
Propane	74-98-6	1,800 mg/m3	1,000 ppm	-	OSHA TWA
Propane	74-98-6	-	-	-	ACGIH TWA

Personal protective equipment

Respiratory protection : Use only with adequate ventilation.
Do not spray in enclosed areas.

Hand protection : No special requirements.

Eye protection : No special requirements.

Skin and body protection : No special requirements.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Form	: aerosol
Color	: white
Odour	: sweet
Odour Threshold	: Test not applicable for this product type
pH	: 5.3
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: Test not applicable for this product type
Flash point	: 93.3 °C 199.94 °F Method: Tag Closed Cup (TCC) liquid -156 °F Method: Tag Closed Cup (TCC) Propellant
Evaporation rate	: No data available
Flammability (solid, gas)	: Flammable aerosol.
Upper/lower flammability or explosive limits	: No data available
Vapour pressure	: Organic compounds with vapour pressure > 0.01 Kpa at 20 °C
Vapour density	: No data available
Relative density	: 1.006 g/cm3 at 21.6 °C

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Solubility(ies)	: partly miscible	
Partition coefficient: n-octanol/water	: Test not applicable for this product type	
Auto-ignition temperature	: The substance or mixture is not classified as self heating.	
Decomposition temperature	: The substance or mixture is not classified self-reactive.	
Viscosity, dynamic	: 1.0 mPa.s at 20 °C	
Viscosity, kinematic	: No data available	
Oxidizing properties	: No data available	
Volatile Organic Compounds Total VOC (wt. %)*	: 10.4 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations	
Other information	: None identified	:

10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.
Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under recommended storage conditions.
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- Possibility of hazardous reactions** : If accidental mixing occurs and toxic gas is formed, exit area immediately. Do not return until well ventilated.
- Conditions to avoid** : Heat, flames and sparks.
- Incompatible materials** : Do not mix with bleach or any other household cleaners. Strong bases
- Hazardous decomposition products** : Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

- Acute oral toxicity** : LD50 > 5,000 mg/kg
- Acute inhalation toxicity** : LC50 > 2.15 mg/l

- Acute dermal toxicity** : LD50 > 5,000 mg/kg

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	Oral
Acute toxicity	No classification proposed	Dermal
Acute toxicity	Category 4	Inhalation - Dust and Mist
Acute toxicity	No classification proposed	Inhalation - Vapour
Acute toxicity	No classification proposed	Inhalation - Gas
Skin corrosion/irritation	No classification proposed	-
Serious eye damage/eye irritation	No classification proposed	-
Skin sensitisation	No classification proposed	-

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Respiratory sensitisation	No classification proposed	-
Germ cell mutagenicity	No classification proposed	-
Carcinogenicity	No classification proposed	-
Reproductive toxicity	No classification proposed	-
Specific target organ toxicity - single exposure	No classification proposed	-
Specific target organ toxicity - repeated exposure	No classification proposed	-
Aspiration hazard	No classification proposed	-

Aggravated Medical Condition : None known.

12. ECOLOGICAL INFORMATION

Product : The product itself has not been tested.

Toxicity

The ingredients in this formula have been reviewed and no adverse impact to the environment is expected when used according to label directions.

Toxicity to fish

Components	End point	Species	Value	Exposure time
Isobutane	LC50 QSAR	Fish	27.98 mg/l	96 h
Propane	LC50	Fish	27.98 mg/l	96 h
Piperonyl butoxide	LC50	Cyprinodon variegatus (sheepshead minnow)	3.94 mg/l	96 h

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	flow-through test NOEC	Pimephales promelas (fathead minnow)	0.18 mg/l	35 d
Metofluthrin	LC50	Oncorhynchus mykiss (rainbow trout)	0.0012 mg/l	96 h

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Isobutane	LC50 QSAR	Daphnid	16.33 mg/l	48 h
Propane	LC50	Daphnid	14.22 mg/l	48 h
Piperonyl butoxide	flow-through test EC50 Calculated	Crassostrea virginica	0.23 mg/l	96 h
	flow-through test NOEC Measured	Daphnia magna	0.03 mg/l	21 d
Metofluthrin	EC50	Daphnia magna (Water flea)	0.0047 mg/l	48 h

Toxicity to aquatic plants

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Components	End point	Species	Value	Exposure time
Isobutane	EC50 QSAR	Green algae	8.57 mg/l	96 h
Propane	No data available			
Piperonyl butoxide	EC50 Calculate d OECD Test Guideline 201	Selenastrum capricornutum, Skeletonema costatum	0.17 mg/l	72 h
Metofluthrin	ErC50 No data available	Pseudokirchneriella subcapitata (green algae)	0.37 mg/l	

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Isobutane	70 %	< 10 d	Readily biodegradable.
Propane	70 %	< 10 d	Readily biodegradable.
Piperonyl butoxide			Not readily biodegradable.
Metofluthrin	No data available		Not readily biodegradable.

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n-Octanol/water (log)
Isobutane	1.57 - 1.97	2.8
Propane	No data available	2.36
Piperonyl butoxide	91 - 380	4.8
Metofluthrin	120	5

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Mobility

Component	End point	Value
Isobutane	No data available	
Propane	No data available	
Piperonyl butoxide	Koc	599
Metofluthrin	Koc	6184

PBT and vPvB assessment

Component	Results
Isobutane	Not fulfilling PBT and vPvB criteria
Propane	Not fulfilling PBT and vPvB criteria
Piperonyl butoxide	Not fulfilling PBT and vPvB criteria
Metofluthrin	Not fulfilling PBT and vPvB criteria

Other adverse effects : None known.**13. DISPOSAL CONSIDERATIONS****PESTICIDAL WASTE:**

For disposal information, please read and follow Disposal instructions on the pesticide label.
Consumer may discard empty container in trash, or recycle where facilities exist.

14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up-to-date shipping information.

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	Land transport	Sea transport	Air transport
UN number	1950	1950	1950
UN proper shipping name	Aerosols, Flammable, (Piperonyl Butoxide)	Aerosols, Flammable, (Piperonyl Butoxide)	Aerosols, Flammable, (Piperonyl Butoxide)
Transport hazard class(es)	2.1	2	2.1
Packing group	-	-	-
Environmental hazards	-	Marine pollutant	-
Special precautions for user	Limited quantities derogation may be applicable to this product, please check transport documents.	Limited quantities derogation may be applicable to this product, please check transport documents.	Limited quantities derogation may be applicable to this product, please check transport documents.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Product not transported as bulk.	Product not transported as bulk.	Product not transported as bulk.

15. REGULATORY INFORMATION**FIFRA Labeling**

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:

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Contents under pressure.

Exposure to temperatures above 130° F may cause bursting.

Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

California Prop. 65 : This product is not subject to the reporting requirements under California's Proposition 65.

16. OTHER INFORMATION

HMIS Ratings

Health	0
Flammability	4
Reactivity	0

NFPA Ratings

Health	0
Fire	4
Reactivity	0
Special	-

This information is being provided in accordance with the Occupational Safety and Health Administration (OSHA) regulation (29 CFR 1910.1200). The information supplied is designed for workplaces where product use and frequency of exposure exceeds that established for the labeled consumer use.

Further information

This document has been prepared using data from sources considered to be technically reliable. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use are beyond the seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

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Prepared by	SC Johnson Global Safety Assessment & Regulatory Affairs (GSARA)
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