

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



Raid Flying Insect Killer – Orange Breeze (EPA REG NO. 4822-569)

Version 1.0

Print Date 02/05/2019

Revision Date 03/09/2017

SDS Number 350000032485
GEN_SOF Number 59894

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : **Raid Flying Insect Killer – Orange Breeze (EPA REG NO. 4822-569)**

Recommended use : Insecticide

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

Telephone : +18005585252
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
Flammable aerosols	Category 2	Flammable aerosol.
Gases under pressure	Compressed gas	Contains gas under pressure; may explode if heated.

Labelling

Hazard symbols

Flame
Gas cylinder

Signal word

Warning

Hazard statements

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

Precautionary statements

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

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

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Weight percent
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	64742-47-8	5.00 - 10.00
Butane	106-97-8	5.00 - 10.00
Propane	74-98-6	5.00 - 10.00
Isobutane	75-28-5	5.00 - 10.00
d-Phenothrin	188023-86-1	0.10 - 1.00
Prallethrin	23031-36-9	0.10 - 1.00

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

- Eye contact** : No special requirements
- Skin contact** : No special requirements
- Inhalation** : No special requirements.
- Ingestion** : No special requirements

5. FIREFIGHTING MEASURES

- Suitable extinguishing** : Use water spray, alcohol-resistant foam, dry chemical or

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- media** : 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 explosion do not breathe fumes.
- NFPA Classification** : NFPA Level 1 Aerosol

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.

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For personal protection see section 8.
Use only as directed.
KEEP OUT OF REACH OF CHILDREN AND PETS.
Pressurized container.
Do not pierce or burn, even after use.

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.

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 feedingstuffs.
Keep in a dry, cool and well-ventilated place.

Other data : Stable under recommended storage conditions.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m3	ppm	Non-standard units	Basis
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	64742-47-8	1,200 mg/m3	152 ppm	-	SUPPLIER
Butane	106-97-8	-	1,000 ppm	-	ACGIH STEL
Propane	74-98-6	1,800 mg/m3	1,000 ppm	-	OSHA TWA
Propane	74-98-6	-	-	-	ACGIH TWA
Isobutane	75-28-5	-	1,000 ppm	-	ACGIH STEL

Personal protective equipment

Respiratory protection : 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** : opaque
- Color** : white
- Odor** : Citrus

- Odour Threshold** : Test not applicable for this product type

- pH** : 6.34
at (20 °C)
1% solution

- Melting point/freezing point** : Test not applicable for this product type
- Initial boiling point and boiling range** : Test not applicable for this product type
- Flash point** : -88.3 °C
-126.94 °F
Propellant
62 °C
143.6 °F
Method: Pensky Martens closed cup liquid

- Evaporation rate** : Test not applicable for this product type

- Flammability (solid, gas)** : not auto-flammable

- Upper/lower flammability or explosive limits** : Test not applicable for this product type

- Vapour pressure** : Test not applicable for this product type

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- Vapour density** : Test not applicable for this product type

- Relative density** : 0.847 g/cm³ at 25 °C 0.828 g/cm³ at 54 °C

- Solubility(ies)** : dispersible

- Partition coefficient: n-octanol/water** : Test not applicable for this product type

- Auto-ignition temperature** : not auto-flammable

- Decomposition temperature** : Test not applicable for this product type

- Viscosity, dynamic** : Test not applicable for this product type

- Viscosity, kinematic** : Test not applicable for this product type

- Oxidizing properties** : Test not applicable for this product type

- Volatile Organic Compounds Total VOC (wt. %)*** : 19.1 % - additional exemptions may apply
*as defined by US Federal and State Consumer Product Regulations

- Other information** : None identified :

10. STABILITY AND REACTIVITY

- Possibility of hazardous reactions** : If accidental mixing occurs and toxic gas is formed, exit area immediately. Do not return until well ventilated.

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Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents
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

Emergency Overview : Warning

Acute oral toxicity : LD50

Acute inhalation toxicity : LC50

Acute dermal toxicity : LD50

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	Oral
Acute toxicity	No classification proposed	Dermal
Acute toxicity	No classification proposed	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
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	LC50	Fish	> 1,028 mg/l	96 h
Butane	LC50 QSAR	Fish	27.98 mg/l	96 h

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Propane	LC50	Fish	27.98 mg/l	96 h
Isobutane	LC50 QSAR	Fish	27.98 mg/l	96 h
d-Phenothrin	LC50	Oncorhynchus mykiss (rainbow trout)	0.0027 mg/l	96 h
	NOEC	Oncorhynchus mykiss (rainbow trout)	> 0.0011 mg/l	90 d
Prallethrin	LC50	Oncorhynchus mykiss (rainbow trout)	0.012 mg/l	96 h
	flow- through test NOEC	Oncorhynchus mykiss (rainbow trout)	0.003 mg/l	90 d

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	EC50	Daphnid	> 3,193 mg/l	48 h
Butane	No data available			
Propane	LC50	Daphnid	14.22 mg/l	48 h

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Isobutane	LC50 QSAR	Daphnid	16.33 mg/l	48 h
d-Phenothrin	EC50	Daphnia (water flea)	0.0043 mg/l	48 h
	NOEC	Daphnia (water flea)	0.00047 mg/l	21 d
Prallethrin	EC50	Daphnia magna (Water flea)	0.0062 mg/l	48 h
	NOEC	Daphnia magna	0.00065 mg/l	21 d

Toxicity to aquatic plants

Components	End point	Species	Value	Exposure time
Hydrocarbons, C14-C18, n- alkanes, isoalkanes, cyclics, <2% aromatics	EC50	Skeletonema costatum	> 3,198 mg/l	72 h
Butane	EC50 QSAR	Green algae	7.71 mg/l	96 h
Propane	No data available			
Isobutane	EC50 QSAR	Green algae	8.57 mg/l	96 h
d-Phenothrin	EbC50	Algae	> 0.011 mg/l	72 h
Prallethrin	EC50	Pseudokirchneriella subcapitata (green algae)	2 mg/l	96 h

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Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	74 %	28 d	Readily biodegradable
Butane	100 %	385.5 h	Readily biodegradable
Propane	70 %	< 10 d	Readily biodegradable
Isobutane	70 %	< 10 d	Readily biodegradable
d-Phenothrin	1 %	28 d	Not readily biodegradable.
Prallethrin	No data available		Not readily biodegradable.

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n-Octanol/water (log)
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	61 - 159	No data available
Butane	No data available	2.89
Propane	No data available	2.36
Isobutane	1.57 - 1.97	2.8
d-Phenothrin	2,506 - 3,192 Measured	6.8
Prallethrin	No data available	4.49

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Mobility

Component	End point	Value
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	No data available	
Butane	No data available	
Propane	No data available	
Isobutane	No data available	
d-Phenothrin	Koc	125893
Prallethrin	No data available	

PBT and vPvB assessment

Component	Results
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not fulfilling PBT and vPvB criteria
Butane	Not fulfilling PBT and vPvB criteria
Propane	Not fulfilling PBT and vPvB criteria
Isobutane	Not fulfilling PBT and vPvB criteria
d-Phenothrin	Not fulfilling PBT and vPvB criteria
Prallethrin	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.

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14. TRANSPORT INFORMATION

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

	Land transport	Sea transport	Air transport
UN number	1950	1950	1950
UN proper shipping name	Aerosols, Flammable (d-Phenothrin, Prallethrin), Marine Pollutant	Aerosols, Flammable (d-Phenothrin, Prallethrin), Marine Pollutant	Aerosols, Flammable (d-Phenothrin, Prallethrin), Marine Pollutant
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.

15. REGULATORY INFORMATION

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.

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16. OTHER INFORMATION

HMIS Ratings

Health	1
Flammability	4
Reactivity	0

NFPA Ratings

Health	1
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.

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