

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®)
(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
Aerosol	Category 2	Flammable aerosol.
Gases under pressure	Liquefied 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

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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	10.00 - 30.00
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

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

media carbon dioxide.

Specific hazards during firefighting : Container may melt and leak 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.

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.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

Form	: aerosol
Form	: Compressed gas
Color	: translucent
Odor	: pleasant
Odour Threshold	: No data available
pH	: Not applicable
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: -7 °C 19.4 °F Propellant
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper/lower flammability or explosive limits	: No data available
Vapour pressure	: No data available
Vapour density	: No data available
Relative density	: 0.82 g/cm ³

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

Solubility(ies) : dispersible

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : Test not applicable for this product type

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

Volatile Organic Compounds : 19 % - additional exemptions may apply
Total VOC (wt. %)* *as defined by US Federal and State Consumer Product Regulations

Other information : None identified :

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions : Stable under recommended storage conditions.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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

11. TOXICOLOGICAL INFORMATION

Emergency Overview : Warning

Acute oral toxicity :

Acute inhalation toxicity :

Acute dermal toxicity :

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	-
Skin corrosion/irritation	No classification proposed	-
Serious eye damage/eye irritation	No classification proposed	-
Skin sensitisation	No classification proposed	-
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.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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
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

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

**RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)**

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

	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
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

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

**RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)**

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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

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.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

**RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)**

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

--	--	--	--

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

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

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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 : No data available

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.

	Land transport	Sea transport	Air transport
UN number	1950	1950	1950
UN proper shipping name	AEROSOLS, Flammable	AEROSOLS, Flammable	AEROSOLS, Flammable
Transport hazard class(es)	2.1	2	2.1
Packing group	-	-	-
Environmental hazards	-	-	-
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.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

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:

CAUTION:

Causes moderate eye irritation.

CONTENTS UNDER PRESSURE.

Exposure to temperatures above 130° F may cause bursting.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

This product is highly toxic to fish and aquatic invertebrates.

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.

Registration # / Agency

4822-569/US/EPA

16. OTHER INFORMATION

HMIS Ratings

Health	2
Flammability	4
Reactivity	0

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® FLYING INSECT KILLER 7 (OUTDOOR FRESH®) (EPA Reg. No. 4822-569)

Version 2.0

Print Date 03/12/2018

Revision Date 07/12/2016

SDS Number 350000016793

NFPA Ratings

Health	2
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)
-------------	--