

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935
SITE_FORM Number
30000000000000003269.003

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name : RAID® FLEA KILLER PLUS FOGGER

Use of the Substance/Mixture : Insecticide

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

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

Emergency Overview

Appearance / Odor : clear / aerosol / pleasant

Immediate Concerns

: Warning
FLAMMABLE:
Avoid contact with skin, eyes and clothing.
Keep away from heat, sparks and flame.
Do not puncture or incinerate.
Do not store at temperatures above 120 Deg. F (50 Deg C), as container may burst.
Avoid breathing vapors, mist or gas.
Contents under pressure.
Harmful if absorbed through skin.

Potential Health Effects

Exposure routes : Eye, Skin, Inhalation, Ingestion.

Eyes : May cause:
Mild eye irritation

Skin : Prolonged or repeated contact may dry skin and cause irritation.
May cause systemic effects.
Harmful if absorbed through skin.

Inhalation : May cause systemic effects.
Harmful if inhaled.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935

SITE_FORM Number
300000000000000003269.003

- Ingestion : May cause irritation to mouth, throat and stomach.
May cause abdominal discomfort.
- Aggravated Medical Condition : Persons with pre-existing skin disorders may be more susceptible to irritating effects.
Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc. may be more susceptible to irritating effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous chemicals present at or above reportable levels as defined by OSHA 29 CFR 1910.1200 or the Canadian Controlled Products Regulations are listed in this table:

Chemical Name	CAS-No.	Weight percent
Butane	106-97-8	10.00 - 30.00
Propane	74-98-6	5.00 - 10.00
Isobutane	75-28-5	5.00 - 10.00
Distillates (petroleum), hydrotreated light	64742-47-8	1.00 - 5.00
n-Octyl bicycloheptene dicarboximide	113-48-4	1.00 - 5.00
Piperonyl butoxide	51-03-6	0.10 - 1.00
Pyrethrum	8003-34-7	0.10 - 1.00
Methoprene	65733-16-6	0.0001 - 0.10

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

4. FIRST AID MEASURES

- Eye contact : Rinse with plenty of water. Get medical attention if irritation develops and persists.
- Skin contact : Flush immediately with plenty of water for at least 15 to 20 minutes. Get medical attention immediately. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse.
- Inhalation : Remove to fresh air. If breathing is affected, get medical attention. If not breathing, give artificial respiration. Get medical attention immediately.
- Ingestion : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935

SITE_FORM Number
300000000000000003269.003

5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire. 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. For large quantities of flammable liquids, consider containment to prevent the spread of fire. Wear full protective clothing and positive pressure self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.
- Flash point : < -7 °C
< 19.4 °F
Method: Tag Closed Cup (TCC)
Note: Propellant
- Lower explosion limit : Note: no data available
- Upper explosion limit : Note: no data available
- NFPA Classification : NFPA Level 1 Aerosol

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Remove all sources of ignition.
Wear personal protective equipment.
- 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 for 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.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935
SITE_FORM Number
300000000000000003269.003

Dike large spills.
Clean residue from spill site.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : Do not puncture or incinerate.
Do not enter places where used or stored until adequately ventilated.
Avoid breathing vapors, mist or gas.
Do not spray toward face.
Do not use in areas without adequate ventilation.
Use only as directed.
KEEP OUT OF REACH OF CHILDREN AND PETS.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Keep away from heat and sources of ignition.
Take measures to prevent the build up of electrostatic charge.

Storage

Requirements for storage areas and containers : Keep away from food, drink and animal feedingstuffs.
Do not store at temperatures above 120 Deg. F (50 Deg C), as container may burst.
Keep in a dry, cool and well-ventilated place.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935

SITE_FORM Number
300000000000000003269.003

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m3	ppm	Non-standard units	Basis
Butane	106-97-8	-	1,000 ppm	-	ACGIH TWA
Propane	74-98-6	1,800 mg/m3	1,000 ppm	-	OSHA TWA
Propane	74-98-6	-	1,000 ppm	-	ACGIH TWA
Isobutane	75-28-5	-	1,000 ppm	-	ACGIH TWA
Distillates (petroleum), hydrotreated light	64742-47-8	1,200 mg/m3	152 ppm	-	SUPPLIER

Personal protective equipment

Respiratory protection

Substantial amounts of mist/vapors can be controlled with local exhaust ventilation or respiratory protection. Do not spray in enclosed areas.

Hand protection

: Rubber gloves

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. Smoking, eating and drinking should be prohibited in the application area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : aerosol
Color : clear
Odor : pleasant

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935

SITE_FORM Number
300000000000000003269.003

pH	:	not applicable
Boiling point	:	no data available
Freezing point	:	no data available
Flash point	:	< -7 °C < 19.4 °F Method: Tag Closed Cup (TCC) Propellant
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Auto-ignition temperature	:	no data available
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available
Vapour pressure	:	no data available
Density	:	0.9 g/cm3
Water solubility	:	negligible
Partition coefficient: n-octanol/water	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Relative vapor density	:	no data available
Volatile Organic Compounds Total VOC (wt. %)*	:	30 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations

10. STABILITY AND REACTIVITY

Conditions to avoid	:	Heat, flames and sparks.
Materials to avoid	:	Strong oxidizing agents
Hazardous decomposition products	:	Thermal decomposition can lead to release of irritating gases and vapours.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935

SITE_FORM Number

30000000000000003269.003

Thermal decomposition : Note: no data available

Hazardous reactions : Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50
estimated
8,089 mg/kg

Acute inhalation toxicity : LC50
estimated
> 4.6 mg/l

Acute dermal toxicity : LD50
Measured
> 2,000 mg/kg

Chronic effects

Carcinogenicity : no data available

Mutagenicity : no data available

Reproductive effects : no data available

Teratogenicity : no data available

Sensitisation : Substances is not a sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects : no data available

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935

SITE_FORM Number

300000000000000003269.003

13. DISPOSAL CONSIDERATIONS

PESTICIDAL WASTE:

Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding disposal.

Consumer may discard empty container in trash, or recycle where facilities exist.

14. TRANSPORT INFORMATION

Land transport

U.S. DOT and Canadian TDG Surface Transportation:

Proper shipping name UN 1950 AEROSOLS, Flammable, 2.1, LTD QTY

Class: 2.1

UN number: 1950

Packaging group: None.

Note: Limited quantities derogation may be applicable to this product, please check transport documents.

Sea transport

IMDG:

Proper shipping name UN 1950 AEROSOLS, Flammable, 2.1, LTD QTY

Class: 2

UN number: 1950

Packaging group: None.

EmS: F-D, S-U

Note: Limited quantities derogation may be applicable to this product, please check transport documents.

Air transport

ICAO/IATA:

Proper shipping name UN 1950 AEROSOLS, Flammable, 2.1, LTD QTY

Class: 2.1

UN/ID No.: UN 1950

Packaging group: None.

Note: SC Johnson typically does not ship products via air. Refer to IATA/ICAO Dangerous Goods Regulations for detailed instructions when shipping this item by air.

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935
SITE_FORM Number
300000000000000003269.003

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.

Registration # / Agency
4822-229/US/EPA

16. OTHER INFORMATION

HMIS Ratings

Health	1
Flammability	4
Reactivity	0

NFPA Ratings

Health	1
Fire	4
Reactivity	0
Special	-

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)
--------------	--

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



RAID® FLEA KILLER PLUS FOGGER

Version 2.0

Print Date 07/22/2013

Revision Date 09/26/2012

MSDS Number 350000003935
SITE_FORM Number
30000000000000003269.003