

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



RAID® HOUSE & GARDEN BUG KILLER FORMULA 7

Version 1.1

Print Date 04/03/2015

Revision Date 02/23/2015

SDS Number 350000010288

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : RAID® HOUSE & GARDEN BUG KILLER FORMULA 7

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

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.

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Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No. | Weight percent |
|--|-------------|----------------|
| Butane | 106-97-8 | 5.00 - 10.00 |
| Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics | 64742-47-8 | 5.00 - 10.00 |
| Propane | 74-98-6 | 1.00 - 5.00 |
| Isobutane | 75-28-5 | 1.00 - 5.00 |
| D-Allethrin | 584-79-2 | 0.10 - 1.00 |
| d-Phenothrin | 188023-86-1 | 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 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

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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.
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.

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

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 STEL |
| Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics | 64742-47-8 | 1,200 mg/m3 | 152 ppm | - | SUPPLIER |
| Propane | 74-98-6 | - | 1,000 ppm | - | ACGIH TWA |
| Propane | 74-98-6 | 1,800 mg/m3 | 1,000 ppm | - | OSHA 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.

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9. PHYSICAL AND CHEMICAL PROPERTIES

- Form** : aerosol
- Form** : Compressed gas
- Color** : opaque
- 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
Method: Tag Closed Cup (TCC)
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

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| | | | |
|--|---|--|---|
| Relative density | : | 0.85 g/cm ³ | |
| Solubility(ies) | : | slightly soluble | |
| Partition coefficient: n-octanol/water | : | No data available | |
| Auto-ignition temperature | : | No data available | |
| Decomposition temperature | : | | |
| Viscosity, dynamic | : | No data available | |
| Viscosity, kinematic | : | No data available | |
| Oxidizing properties | : | No data available | |
| Volatile Organic Compounds Total VOC (wt. %)* | : | 15.8 % - 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 | : | Stable under recommended storage conditions. |
| Conditions to avoid | : | Heat, flames and sparks. |
| Incompatible materials | : | Strong oxidizing agents |
| Hazardous decomposition products | : | Thermal decomposition can lead to release of irritating gases and vapours. |

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11. TOXICOLOGICAL INFORMATION

| | |
|----------------------------------|---|
| Emergency Overview | : Warning |
| Acute oral toxicity | : NA GHS LD50 estimated > 5,000 mg/kg |
| Acute inhalation toxicity | : NA GHS LC50 (dust and mist) estimated > 2.99 mg/l |
| Acute dermal toxicity | : NA GHS LD50 estimated > 5,000 mg/kg |

| 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 | - |

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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 |
|--|-------------------|-------------------------------------|---------------|---------------|
| Butane | No data available | | | |
| Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics | LC50 | Fish | > 1,028 mg/l | 96 h |
| Propane | LC50 | Fish | 27.98 mg/l | 96 h |
| Isobutane | LC50 | Fish | 27.98 mg/l | 96 h |
| D-Allethrin | LC50 | Danio rerio (zebra fish) | 0.0708 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 |

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Toxicity to aquatic invertebrates

| Components | End point | Species | Value | Exposure time |
|--|---------------------------|----------------------------|--------------|---------------|
| Butane | No data available | | | |
| Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics | EC50 No data available | | > 3,193 mg/l | 48 h |
| Propane | LC50 | Daphnid | 14.22 mg/l | 48 h |
| Isobutane | LC50 | Daphnid | 16.33 mg/l | 48 h |
| D-Allethrin | EC50 | Daphnia magna (Water flea) | 0.047 mg/l | 48 h |
| d-Phenothrin | EC50 | Daphnia (water flea) | 0.0043 mg/l | 48 h |
| | NOEC | Daphnia (water flea) | 0.00062 mg/l | 21 d |

Toxicity to aquatic plants

| Components | End point | Species | Value | Exposure time |
|--|-------------------|----------------------|------------|---------------|
| Butane | No data available | | | |
| Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics | EC50 | Skeletonema costatum | 3,198 mg/l | 72 h |

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| | | | | |
|--------------|----------------------------|---------------------------------------|--------------|------|
| Propane | No data available | | | |
| Isobutane | EC50 | Green algae | 8.57 mg/l | 96 h |
| D-Allethrin | IC50 | Desmodesmus subspicatus (green algae) | 1.1 mg/l | 72 h |
| d-Phenothrin | EbC50 No data available | | > 0.011 mg/l | 72 h |

Persistence and degradability

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

Bioaccumulative potential

| Component | Bioconcentration factor (BCF) | Partition Coefficient n-Octanol/water (log) |
|--|-------------------------------|---|
| Butane | No data available | 2.89 |
| Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics | No data available | No data available |
| Propane | No data available | 2.36 |
| Isobutane | 1.57 - 1.97 | 2.8 |
| D-Allethrin | 20 | 3.07 |
| d-Phenothrin | 2,506 - 3,192 Measured | 6.8 |

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Mobility

| Component | End point | Value |
|--|-------------------|--------|
| Butane | No data available | |
| Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics | No data available | - |
| Propane | No data available | |
| Isobutane | No data available | |
| D-Allethrin | Koc | 9500 |
| d-Phenothrin | Koc | 125893 |

PBT and vPvB assessment

| Component | Results |
|--------------|--------------------------------------|
| Butane | Not fulfilling PBT and vPvB criteria |
| Propane | Not fulfilling PBT and vPvB criteria |
| Isobutane | Not fulfilling PBT and vPvB criteria |
| D-Allethrin | Not fulfilling PBT and vPvB criteria |
| d-Phenothrin | 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, 2.1 | AEROSOLS, Flammable, 2.1 | AEROSOLS, Flammable, 2.1 |
| 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. |

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.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds.

This pesticide is 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.

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Registration # / Agency
4822-283/US/EPA

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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