

**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](http://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

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**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.

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**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**

<b>Form</b>	:	aerosol
<b>Form</b>	:	Compressed gas
<b>Color</b>	:	opaque
<b>Odor</b>	:	pleasant
<b>Odour Threshold</b>	:	No data available
<b>pH</b>	:	Not applicable
<b>Melting point/freezing point</b>	:	No data available
<b>Initial boiling point and boiling range</b>	:	No data available
<b>Flash point</b>	:	< -7 °C < 19.4 °F Method: Tag Closed Cup (TCC) Propellant
<b>Evaporation rate</b>	:	No data available
<b>Flammability (solid, gas)</b>	:	No data available
<b>Upper/lower flammability or explosive limits</b>	:	No data available
<b>Vapour pressure</b>	:	No data available
<b>Vapour density</b>	:	No data available

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<b>Relative density</b>	:	0.85 g/cm <sup>3</sup>	
<b>Solubility(ies)</b>	:	slightly soluble	
<b>Partition coefficient: n-octanol/water</b>	:	No data available	
<b>Auto-ignition temperature</b>	:	No data available	
<b>Decomposition temperature</b>	:		
<b>Viscosity, dynamic</b>	:	No data available	
<b>Viscosity, kinematic</b>	:	No data available	
<b>Oxidizing properties</b>	:	No data available	
<b>Volatile Organic Compounds Total VOC (wt. %)*</b>	:	15.8 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations	
<b>Other information</b>	:	None identified	:

### 10. STABILITY AND REACTIVITY

<b>Possibility of hazardous reactions</b>	:	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	:	Heat, flames and sparks.
<b>Incompatible materials</b>	:	Strong oxidizing agents
<b>Hazardous decomposition products</b>	:	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
<b>UN number</b>	1950	1950	1950
<b>UN proper shipping name</b>	AEROSOLS, Flammable, 2.1	AEROSOLS, Flammable, 2.1	AEROSOLS, Flammable, 2.1
<b>Transport hazard class(es)</b>	2.1	2	2.1
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	-	-	-
<b>Special precautions for user</b>	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**

<b>Health</b>	1
<b>Flammability</b>	4
<b>Reactivity</b>	0

**NFPA Ratings**

<b>Health</b>	1
<b>Fire</b>	4
<b>Reactivity</b>	0
<b>Special</b>	-

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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