

## Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



# OFF!® DEFENSE INSECT REPELLENT 2 (EPA REG. NO. 4822-556)

Version 1.0

Print Date 08/18/2021

Revision Date 02/16/2018

SDS Number 350000015255

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product information

**Product name** : OFF!® DEFENSE INSECT REPELLENT 2 (EPA REG. NO. 4822-556)

**Recommended use** : Insect Repellent

**Restrictions on use** : Use only as directed on label

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

**Telephone** : +1-800-558-5252

**Emergency telephone number** : 24 Hour Medical Emergency Phone: (866)231-5406  
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 liquids     | Category 3      | Flammable liquid and vapour.   |
| Eye irritation        | Category 2A     | Causes serious eye irritation. |

### Labelling

#### Hazard symbols

Flame  
Exclamation mark

#### Signal word

Warning

#### Hazard statements

Flammable liquid and vapour.  
Causes serious eye irritation.

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### Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

In case of fire: Use alcohol-resistant foam, carbon dioxide or dry sand to extinguish.

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

Store in a well-ventilated place. Keep cool.

Dispose of contents/ container to an approved incineration plant.

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves.

Wash hands thoroughly after handling.

**Other hazards** : None identified

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS-No.     | Weight percent |
|---------------|-------------|----------------|
| Ethyl alcohol | 64-17-5     | 30.00 - 60.00  |
| Icaridine     | 119515-38-7 | 10.00 - 30.00  |

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

### Description of first aid measures

**Eye contact** : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

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**Skin contact** : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If you suspect a reaction to this product, discontinue use and remove contaminated clothing.

**Inhalation** : No special requirements.

**Ingestion** : No special requirements

### Most important symptoms and effects, both acute and delayed

**Eyes** : Causes serious eye irritation.

**Skin effect** : No adverse effects expected when used as directed.

**Inhalation** : No adverse effects expected when used as directed.

**Ingestion** : May cause irritation to mouth, throat and stomach.  
May cause abdominal discomfort.  
No adverse effects expected when used as directed.

### Indication of any immediate medical attention and special treatment needed

See Description of first aid measures unless otherwise stated.

## 5. FIREFIGHTING MEASURES

**Suitable extinguishing media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Specific hazards during firefighting** : Flammable liquid. Vapors are heavier than air and may travel to a source of ignition and flash back. Liquid run-off to sewers may create fire/explosion hazard. 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. For large quantities of flammable liquids, consider containment to prevent the spread of fire. Wear full protective

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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.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
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** : Soak up with inert absorbent material.  
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 eyes and lips.  
For personal protection see section 8.  
Use only as directed.  
KEEP OUT OF REACH OF CHILDREN AND PETS.  
Wash thoroughly after handling.

- Advice on protection against fire and explosion** : Keep away from sources of ignition - No smoking.  
Take measures to prevent the build up of electrostatic charge.  
Use only non-sparking tools.  
Use explosion-proof equipment.  
Ground/bond container and receiving equipment.

### Storage

- Requirements for storage** : Keep container closed when not in use.

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**areas and containers**

Keep away from food, drink and animal feedingstuffs.  
Keep tightly closed.  
Store in a well-ventilated place. Keep cool.

**Other data**

: Stable under recommended storage conditions.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Occupational Exposure Limits**

| Components    | CAS-No. | mg/m3       | ppm       | Non-standard units | Basis      |
|---------------|---------|-------------|-----------|--------------------|------------|
| Ethyl alcohol | 64-17-5 | 1,900 mg/m3 | 1,000 ppm | -                  | OSHA TWA   |
| Ethyl alcohol | 64-17-5 | -           | 1,000 ppm | -                  | ACGIH STEL |

**Personal protective equipment****Respiratory protection** : Do not spray in enclosed areas.**Hand protection** : No special requirements.**Eye protection** : Safety glasses with side-shields**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****Form** : liquid**Color** : translucent**Color** : to**Color** : light yellow

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|   |   |
|---|---|
| <b>Odour</b>  | : solvent-like                              |
| <b>Odour Threshold</b>                              | : Test not applicable for this product type |
| <b>pH</b>   | : 5.6<br>at (25 °C)                         |
| <b>Melting point/freezing point</b>                 | : Test not applicable for this product type |
| <b>Initial boiling point and boiling range</b>      | : Test not applicable for this product type |
| <b>Flash point</b>                                  | : 31 °C<br>87.8 °F                          |
| <b>Evaporation rate</b>                             | : Test not applicable for this product type |
| <b>Flammability (solid, gas)</b>                    | : Sustains combustion                       |
| <b>Upper/lower flammability or explosive limits</b> | : Test not applicable for this product type |
| <b>Vapour pressure</b>                              | : Test not applicable for this product type |
| <b>Vapour density</b>                               | :   |
| <b>Relative density</b>                             | : 0.95 g/cm <sup>3</sup> at 25 °C           |
| <b>Solubility(ies)</b>                              | : slightly soluble                          |
| <b>Partition coefficient: n-octanol/water</b>       | : Test not applicable for this product type |
| <b>Auto-ignition temperature</b>                    | : not auto-flammable                        |

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|  |   |  |   |
|--|---|--|---|
| <b>Decomposition temperature</b>                         | : | Test not applicable for this product type  | : |
| <b>Viscosity, dynamic</b>                                | : | Test not applicable for this product type  | : |
| <b>Viscosity, kinematic</b>                              | : | Test not applicable for this product type  | : |
| <b>Oxidizing properties</b>                              | : | Test not applicable for this product type  | : |
| <b>Volatile Organic Compounds<br/>Total VOC (wt. %)*</b> | : | 30.4 % - additional exemptions may apply<br>*as defined by US Federal and State Consumer Product Regulations | : |
| <b>Other information</b>                                 | : | None identified  | : |

**10. STABILITY AND REACTIVITY**

|   |   |  |
|---|---|--|
| <b>Reactivity</b>                         | : | No dangerous reaction known under conditions of normal use.  |
| <b>Chemical stability</b>                 | : | Stable under recommended storage conditions.   |
| <b>Possibility of hazardous reactions</b> | : | If accidental mixing occurs and toxic gas is formed, exit area immediately. Do not return until well ventilated. |
| <b>Conditions to avoid</b>                | : | Heat, flames and sparks.   |
| <b>Incompatible materials</b>             | : | Strong oxidizing agents<br>Do not mix with bleach or any other household cleaners.<br>Strong bases               |
| <b>Hazardous decomposition products</b>   | : | Thermal decomposition can lead to release of irritating gases and vapours.                                       |

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**11. TOXICOLOGICAL INFORMATION****Acute oral toxicity** : LD50 > 5,000 mg/kg**Acute inhalation toxicity** : LC50 > 10 mg/L**Acute dermal toxicity** : LD50 > 5,000 mg/kg

| <b>GHS Properties</b>                              | <b>Classification</b>      | <b>Routes of entry</b>     |
|--|----------------------------|----------------------------|
| 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 | -                          |
| Eye irritation                                     | Category 2A                | -                          |
| 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** : Do not apply to cuts or irritated skin.**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 |
|---------------|--|-------------------------------------|-------------|---------------|
| Ethyl alcohol | LC50   | Fish                                | 11,200 mg/l | 96 h          |
| Icaridine     | LC50   | Oncorhynchus mykiss (rainbow trout) | 173 mg/l    | 96 h          |
|               | flow-through test<br>NOEC<br>Measured<br>OECD<br>Guideline<br>210 (Fish, Early-Life Stage Toxicity Test) | Danio rerio (zebra fish)            | 3.19 mg/l   | 32 d          |

**Toxicity to aquatic invertebrates**

| Components    | End point           | Species            | Value | Exposure time |
|---------------|---------------------|--------------------|-------|---------------|
| Ethyl alcohol | static test<br>LC50 | Ceriodaphnia dubia |       | 48 h          |

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|           |      |                            |            |      |
|-----------|------|----------------------------|------------|------|
|           |      |                            | 5,012 mg/l |      |
|           | NOEC | Daphnia magna              | 9.6 mg/l   | 9 d  |
| Icaridine | EC50 | Daphnia magna (Water flea) | > 100 mg/l | 48 h |

**Toxicity to aquatic plants**

| Components    | End point   | Species                                | Value    | Exposure time |
|---------------|-------------|--|----------|---------------|
| Ethyl alcohol | Static EC50 | Chlorella vulgaris (Fresh water algae) | 275 mg/l | 72 h          |
| Icaridine     |             |  |          |               |

**Persistence and degradability**

| Component     | Biodegradation | Exposure time | Summary                    |
|---------------|----------------|---------------|----------------------------|
| Ethyl alcohol | 97 %           | 28 d          | Readily biodegradable.     |
| Icaridine     | < 1 %          | 28 d          | Not readily biodegradable. |

**Bioaccumulative potential**

| Component     | Bioconcentration factor (BCF) | Partition Coefficient n-Octanol/water (log) |
|---------------|-------------------------------|---|
| Ethyl alcohol | 3.2 estimated                 | -0.35 Measured                              |
| Icaridine     | No data available             | No data available                           |

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**Mobility**

| Component     | End point         | Value |
|---------------|-------------------|-------|
| Ethyl alcohol | No data available |       |
| Icaridine     | No data available |       |

**PBT and vPvB assessment**

| Component     | Results                              |
|---------------|--------------------------------------|
| Ethyl alcohol | Not fulfilling PBT and vPvB criteria |
| Icaridine     | 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.

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|  | Land transport   | Sea transport  | Air transport  |
|--|--|--|--|
| UN number  | 1993   | 1993   | 1993   |
| UN proper shipping name  | UN 1993<br>FLAMMABLE<br>LIQUID N.O.S.<br>(ethanol), 3, III   | UN 1993<br>FLAMMABLE<br>LIQUID N.O.S.<br>(ethanol), 3, III   | UN 1993 FLAMMABLE<br>LIQUID N.O.S.<br>(ethanol), 3, III  |
| Transport hazard class(es)   | 3  | 3  | 3  |
| Packing group  | III  | III  | III  |
| Environmental hazards  | -  | -  | -  |
| Special precautions for user   | Limited quantities<br>derogation may be<br>applicable to this<br>product, please check<br>transport documents. | Limited quantities<br>derogation may be<br>applicable to this<br>product, please check<br>transport documents. | Limited quantities<br>derogation may be<br>applicable to this<br>product, please check<br>transport documents. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Product not<br>transported as bulk.  | Product not<br>transported as bulk.  | Product not transported<br>as bulk.  |

**15. REGULATORY INFORMATION****FIFRA Labeling****WARNING:**

SEVERE EYE IRRITANT.

Avoid contact with eyes.

Flammable.

Keep away from heat, sparks and flame.

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:

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**WARNING:**  
Causes substantial but temporary eye injury.  
Flammable

**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.

**Notification status** : All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

**California Prop. 65** : This product is not subject to the reporting requirements under California's Proposition 65.

**Registration # / Agency**  
4822-556/US/EPA

#### 16. OTHER INFORMATION

##### HMIS Ratings

|              |   |
|--------------|---|
| Health       | 2 |
| Flammability | 3 |
| Reactivity   | 0 |

##### NFPA Ratings

|            |   |
|------------|---|
| Health     | 2 |
| Fire       | 3 |
| 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.

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**Further information**

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