

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 07/27/2021

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.

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/m ³	ppm	Non-standard units	Basis
Ethyl alcohol	64-17-5	1,900 mg/m ³	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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Odour	: solvent-like
Odour Threshold	: Test not applicable for this product type
pH	: 5.6 at (25 °C)
Melting point/freezing point	: Test not applicable for this product type
Initial boiling point and boiling range	: Test not applicable for this product type
Flash point	: 31 °C 87.8 °F
Evaporation rate	: Test not applicable for this product type
Flammability (solid, gas)	: Sustains combustion
Upper/lower flammability or explosive limits	: Test not applicable for this product type
Vapour pressure	: Test not applicable for this product type
Vapour density	:
Relative density	: 0.95 g/cm ³ at 25 °C
Solubility(ies)	: slightly soluble
Partition coefficient: n-octanol/water	: Test not applicable for this product type
Auto-ignition temperature	: not auto-flammable

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

10. STABILITY AND REACTIVITY

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

GHS Properties	Classification	Routes of entry
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 NOEC Measured OECD Guideline 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 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 FLAMMABLE LIQUID N.O.S. (ethanol), 3, III	UN 1993 FLAMMABLE LIQUID N.O.S. (ethanol), 3, III	UN 1993 FLAMMABLE LIQUID N.O.S. (ethanol), 3, III
Transport hazard class(es)	3	3	3
Packing group	III	III	III
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.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Product not transported as bulk.	Product not transported as bulk.	Product not transported 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)
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