according to Hazard Communication Standard; 29 CFR 1910.1200



OFF! FAMILY CARE INSECT REPELLENT VIII (EPA# 4822-537)

Version 1.0 Print Date 03/02/2018

Revision Date 02/28/2018 SDS Number 350000034123

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : OFF! FAMILY CARE INSECT REPELLENT VIII (EPA# 4822-

537)

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 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.
Eye irritation	Category 2B	Causes eye irritation.
Gases under pressure	Compressed gas	Contains gas under pressure; may explode if heated.

Labelling

Hazard symbols

Flame

Gas cylinder

Signal word

Warning

Hazard statements

according to Hazard Communication Standard; 29 CFR 1910.1200



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Flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes eye irritation.

Precautionary statements

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

Keep out of reach of children.

Read label before use.

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.

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.

Pressurized container: Do not pierce or burn, even after use.

Wash hands thoroughly after handling.

Other hazards : Intentional misuse by deliberately concentrating and inhaling

contents can be harmful or fatal.

Excessive exposure to spray mist, fog or vapour may cause

respiratory irritation.

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
Butane	106-97-8	1.00 - 5.00
Propane	74-98-6	1.00 - 5.00
Isobutane	75-28-5	1.00 - 5.00

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

according to Hazard Communication Standard; 29 CFR 1910.1200



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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.

Skin contact : 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 : No adverse effects expected when used as directed.

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

Inhalation : Intentional misuse by deliberately concentrating and inhaling

contents can be harmful or fatal.

Excessive exposure to spray mist, fog or vapour may cause

respiratory irritation.

Ingestion : 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

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

according to Hazard Communication Standard; 29 CFR 1910.1200



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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.

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 eyes and lips.

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. Wash thoroughly after handling.

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.

Storage

according to Hazard Communication Standard; 29 CFR 1910.1200



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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.

Protect from sunlight.

Store in a well-ventilated place.

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
Butane	106-97-8	-	1,000 ppm	-	ACGIH STEL
Propane	74-98-6	1,800 mg/m3	1,000 ppm	-	OSHA TWA
Propane	74-98-6	-	-	-	ACGIH 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.

according to Hazard Communication Standard; 29 CFR 1910.1200



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9. PHYSICAL AND CHEMICAL PROPERTIES

Form aerosol

Color transparent to light yellow

Odour solvent-like

Odour Threshold : Test not applicable for this product type

pН : 10.3

> at (25 °C) 5% solution

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 : -7 °C

> 19.4 °F Propellant >= 22 °C >= 71.6 °F liquid

Evaporation rate : Test not applicable for this product type

Flammability (solid, gas) : Sustains combustion

explosive limits

Upper/lower flammability or : Test not applicable for this product type

Vapour pressure : Test not applicable for this product type

Vapour density : Test not applicable for this product type

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Relative density : 0.85 g/cm3 at 20 °C

Solubility(ies) : slightly soluble

Partition coefficient: n-

octanol/water

: Test not applicable for this product type

Auto-ignition temperature : not auto-flammable

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. %)*

: 65 % - 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.

according to Hazard Communication Standard; 29 CFR 1910.1200



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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.

11. TOXICOLOGICAL INFORMATION

Acute dermal toxicity : LD50 > 5,020 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 2B	-
Skin sensitisation	No classification proposed	-
Respiratory sensitisation	No classification proposed	-
Germ cell mutagenicity	No classification proposed	-

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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	-

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,	Danio rerio (zebra fish)	3.19 mg/l	32 d

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	Early-Life Stage Toxicity Test)			
Butane	LC50 QSAR	Fish	27.98 mg/l	96 h
Propane	LC50	Fish	27.98 mg/l	96 h
Isobutane	LC50 QSAR	Fish	27.98 mg/l	96 h

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Ethyl alcohol	static test LC50	Ceriodaphnia dubia		48 h
			5,012 mg/l	
	NOEC	Daphnia magna	9.6 mg/l	9 d
Icaridine	EC50	Daphnia magna (Water flea)	> 100 mg/l	48 h
Butane	No data available			
Propane	LC50	Daphnid	14.22 mg/l	48 h

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Isobutane	LC50 QSAR	Daphnid	16.33 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				
Butane	EC50 QSAR	Green algae	7.71 mg/l	96 h
Propane	No data available			
Isobutane	EC50 QSAR	Green algae	8.57 mg/l	96 h

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Ethyl alcohol	97 %	28 d	Readily biodegradable.
Icaridine	< 1 %	28 d	Not readily biodegradable.
Butane	100 %	385.5 h	Readily biodegradable.
Propane	70 %	< 10 d	Readily biodegradable.
Isobutane	70 %	< 10 d	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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Butane	No data available	2.89
Propane	No data available	2.36
Isobutane	1.57 - 1.97	2.8

Mobility

Component	End point	Value
Ethyl alcohol	No data available	
Icaridine	No data available	
Butane	No data available	
Propane	No data available	
Isobutane	No data available	

PBT and vPvB assessment

Component	Results
Ethyl alcohol	Not fulfilling PBT and vPvB criteria
Icaridine	Not fulfilling PBT and vPvB criteria
Butane	Not fulfilling PBT and vPvB criteria
Propane	Not fulfilling PBT and vPvB criteria
Isobutane	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	AEROSOLS,	AEROSOLS,	AEROSOLS,
shipping name	Flammable	Flammable	Flammable
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.
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

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.

May cause skin reactions in rare cases.

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.

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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.

16. OTHER INFORMATION

HMIS Ratings

nivii 5 Katiings	
Health	1
Flammability	3
Reactivity	0

NFPA Ratings

Health	1	
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.

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 &

according to Hazard Communication Standard; 29 CFR 1910.1200



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Regulatory Affairs (GSARA)