

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



OFF!® FAMILYCARE INSECT REPELLENT I – SMOOTH & DRY

Version 1.1

Print Date 10/15/2015

Revision Date 02/23/2015

SDS Number 350000010898

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : OFF!® FAMILYCARE INSECT REPELLENT I - SMOOTH & DRY

Recommended use : Insect Repellent

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 1	Extremely flammable aerosol.
Eye irritation	Category 2B	Causes eye irritation.
Gases under pressure	Liquefied gas	Contains gas under pressure; may explode if heated.

Labelling

Hazard symbols

Flame

Gas cylinder

Signal word

Danger

Hazard statements

Extremely 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.

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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.

Do not pierce or burn, even after use.

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	10.00 - 30.00
Butane	106-97-8	10.00 - 30.00
N,N-Diethyl-m-toluamide	134-62-3	10.00 - 30.00
Propane	74-98-6	10.00 - 30.00
Isobutane	75-28-5	10.00 - 30.00
Corn starch	9005-25-8	10.00 - 30.00
Magnesium carbonate	546-93-0	1.00 - 5.00
Isopropyl Myristate	110-27-0	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

- 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

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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 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 2 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

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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

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.

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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	-	1,000 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
Corn starch	9005-25-8	5 mg/m3	-	-	OSHA TWA
Corn starch	9005-25-8	15 mg/m3	-	-	OSHA TWA
Corn starch	9005-25-8	10 mg/m3	-	-	ACGIH TWA
Magnesium carbonate	546-93-0	5 mg/m3	-	-	OSHA TWA
Magnesium carbonate	546-93-0	15 mg/m3	-	-	OSHA TWA

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.

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Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : aerosol

Form : Compressed gas

Color : clear white

Odor : pleasant

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : Not applicable

Initial boiling point and boiling range : Not applicable

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 : 55 psi
at 70 °F

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Vapour density	: No data available
Relative density	: 0.78 g/cm ³
Solubility(ies)	: dispersible
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	:
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: No data available
Oxidizing properties	: No data available
Volatile Organic Compounds Total VOC (wt. %)*	: 66.7 % - 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

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Hazardous decomposition products : Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

Emergency Overview : Danger

Acute oral toxicity : LD50
estimated
3,735 mg/kg

Acute inhalation toxicity : NA GHS LC50 (dust and mist)
Measured
> 2.79 mg/l

Acute dermal toxicity : LD50
estimated
> 2,000 mg/kg

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	-
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	-
Carcinogenicity	No classification proposed	-
Reproductive toxicity	No classification proposed	-
Specific target organ toxicity - single exposure	No classification proposed	-
Specific target organ	No classification proposed	-

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toxicity - repeated exposure		
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	flow-through test LC50	Pimephales promelas (fathead minnow)	14,200 mg/l	96 h
Butane	No data available			
N,N-Diethyl-m-toluamide	static test LC50	Oncorhynchus mykiss (rainbow trout)	71.25 mg/l	96 h
Propane	LC50	Fish	27.98 mg/l	96 h
Isobutane	LC50	Fish	27.98 mg/l	96 h
Corn starch	No data available			

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Magnesium carbonate	static test LC50	Pimephales promelas (fathead minnow)	2,800 mg/l	96 h
Isopropyl Myristate	LC50	Danio rerio (zebra fish)	8,400 mg/l	96 h

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Ethyl alcohol	static test EC50	Daphnia magna (Water flea)	2 mg/l	48 h
	NOEC	Daphnia magna	9.6 mg/l	9 d
Butane	No data available			
N,N-Diethyl-m-toluamide	No data available			
Propane	LC50	Daphnid	14.22 mg/l	48 h
Isobutane	LC50	Daphnid	16.33 mg/l	48 h
Corn starch	No data available			

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Magnesium carbonate	No data available			
Isopropyl Myristate	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
Butane	No data available			
N,N-Diethyl-m-toluamide	No data available			
Propane	No data available			
Isobutane	EC50	Green algae	8.57 mg/l	96 h
Corn starch	No data available			
Magnesium carbonate	static test EC50 Read-across (Analogy)	Desmodesmus subspicatus (green algae)	> 100 mg/l	72 h
Isopropyl Myristate	EC50	Desmodesmus subspicatus	> 100 mg/l	72 h

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Ethyl alcohol	97 %	28 d	Readily biodegradable
Butane	100 %	385.5 h	Readily biodegradable
N,N-Diethyl-m-toluamide	No data available		
Propane	70 %	< 10 d	Readily biodegradable

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Isobutane	70 %	< 10 d	Readily biodegradable
Corn starch	No data available		
Magnesium carbonate	No data available		
Isopropyl Myristate	91.4 %	28 d	Readily biodegradable

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n-Octanol/water (log)
Ethyl alcohol	3.2 estimated	-0.35 Measured
Butane	No data available	2.89
N,N-Diethyl-m-toluamide	No data available	No data available
Propane	No data available	2.36
Isobutane	1.57 - 1.97	2.8
Corn starch	No data available	No data available
Magnesium carbonate	0.89 QSAR	-2.12 QSAR
Isopropyl Myristate	1,220.1	7.71

Mobility

Component	End point	Value
Ethyl alcohol	No data available	
Butane	No data available	
N,N-Diethyl-m-toluamide	No data available	
Propane	No data available	
Isobutane	No data available	
Corn starch	No data available	
Magnesium carbonate	No data available	
Isopropyl Myristate	log Koc	4.08

PBT and vPvB assessment

Component	Results
Ethyl alcohol	Not fulfilling PBT and vPvB criteria
Butane	Not fulfilling PBT and vPvB criteria

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N,N-Diethyl-m-toluamide	Not fulfilling PBT and vPvB criteria
Propane	Not fulfilling PBT and vPvB criteria
Isobutane	Not fulfilling PBT and vPvB criteria
Corn starch	Not fulfilling PBT and vPvB criteria
Magnesium carbonate	Not fulfilling PBT and vPvB criteria
Isopropyl Myristate	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:

WARNING:

Causes substantial but temporary eye injury.

Harmful if swallowed.

Use of this product may cause skin reactions in rare cases.

Flammable.

Contents under pressure.

Exposure to temperatures above 120° F may cause bursting.

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).

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

Registration # / Agency

4822-543/US/EPA

28648/PMRA

16. OTHER INFORMATION

HMIS Ratings

Health	2
Flammability	4
Reactivity	0

NFPA Ratings

Health	2
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.

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