

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



GLADE® LIMITED TIME OFFER PIUG-INS® SCENTED OIL - ORANGE CLOVE 2 REFILLS

Version 1.0

Print Date 10/23/2025

Revision Date 08/29/2024

SDS Number 350000046402

GEN_SOF Number 82284

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : GLADE® LIMITED TIME OFFER PIUG-INS® SCENTED OIL - ORANGE CLOVE 2 REFILLS

Recommended use : Air Freshener

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

Telephone : +1 8005585252
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 4	Combustible liquid.
Eye irritation	Category 2B	Causes eye irritation.

Labelling

Hazard statements

Combustible liquid.
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.
In case of fire: Use alcohol-resistant foam, carbon dioxide or dry sand to extinguish.
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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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.
Wear protective gloves.
Wash hands thoroughly after handling.
Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Weight percent
Orange oils	8008-57-9	5.00 - 10.00
d-Limonene	5989-27-5	5.00 - 10.00
Eugenol	97-53-0	5.00 - 10.00
Cinnamal	104-55-2	1.00 - 5.00
CLOVE OIL	8000-34-8	1.00 - 5.00
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-	121-32-4	1.00 - 5.00
OILS, CINNAMON	8015-91-6	1.00 - 5.00
Isoeugenol	97-54-1	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.

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 : Wash off with plenty of water. If skin irritation or rash occurs: Get medical advice/ attention.

Inhalation : No special requirements.

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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** : 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. Do not use a solid water stream as it may scatter and spread fire. Container may melt and leak in heat of fire.
- Further information** : 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 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** : Outside of normal use, avoid release to the environment.
- Methods and materials for containment and cleaning up** : 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.
For personal protection see section 8.
Use only as directed.
KEEP OUT OF REACH OF CHILDREN AND PETS.
Contaminated work clothing should not be allowed out of the workplace.
Avoid breathing vapours, mist or gas.
Wash thoroughly after handling.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.

Storage

Requirements for storage areas and containers : Keep container closed when not in use.
Store in a well-ventilated place. Keep cool.

Other data : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH or OSHA exposure limits have not been established for this product or reportable ingredients unless noted in the table above.

Personal protective equipment

Respiratory protection : No special requirements.

Hand protection : Wear suitable gloves.

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

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practice. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Color : colourless

Color : to

Color : light yellow

Odor : Citrus
spicy

Odour Threshold : Test not applicable for this product type

pH : Mixture is not soluble in water

Melting point/freezing point : <-20°C

Initial boiling point and boiling range : 70 - 140 °C

Flash point : 76 °C
168.8 °F
Method: ASTM D 93

Evaporation rate : Test not applicable for this product type

Flammability (solid, gas) : Sustains combustion

Upper/lower flammability or : Not determined as it does not affect the liquid flammability

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explosive limits

classification. Flash point is used for classification of flammable liquids.

Vapour pressure

: 0.1252 hPa
at 20 °C

Vapour density

: > 1

Relative density

: 0.9722 g/cm³ at 25 °C estimated

Solubility(ies)

: immiscible

Partition coefficient: n-octanol/water

: Not required as the product is a mixture.

Auto-ignition temperature

: not auto-flammable

Decomposition temperature

: Not measured as mixture is not self-reactive

Viscosity, dynamic

: < 5 cps
at 20 °C

Viscosity, kinematic

: Test not applicable for this product type

Oxidizing properties

: Test not applicable for this product type

Volatile Organic Compounds

: 89 % - additional exemptions may apply
*as defined by US Federal and State Consumer Product Regulations

Total VOC (wt. %)*

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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 : Stable under recommended storage conditions.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

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

11. TOXICOLOGICAL INFORMATION

Emergency Overview : Warning

Acute oral toxicity : LD50 > 5000 mg/kg

Acute inhalation toxicity : LC50 > 10 mg/L

Acute dermal toxicity : LD50 > 5000 mg/kg

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	Oral

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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	-
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 : 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

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expected when used according to label directions.

Toxicity to fish

Components	End point	Species	Value	Exposure time
Orange oils	No data available			
d-Limonene	semi-static test LC50 OECD Test Guideline 203	Pimephales promelas (fathead minnow)	0.41 mg/l	96 h
	semi-static test NOEC	Pimephales promelas (fathead minnow)	0.059 mg/l	8 d
Eugenol	semi-static test LC50	Danio rerio (zebra fish)	13 mg/l	96 h
Cinnamal	LC50	Danio rerio (zebra fish)	3.9 mg/l	96 h
CLOVE OIL	No data available			
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-	flow-through test LC50	Pimephales promelas (fathead minnow)	87.6 mg/l	96 h
OILS, CINNAMON	No data			

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	available			
Isoeugenol	No data available			

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Orange oils	No data available			
d-Limonene	static test EC50	Daphnia magna (Water flea)	0.36 mg/l	48 h
	semi-static test NOEC Measured	Daphnia magna	0.08 mg/l	21 d
Eugenol	static test EC50	Daphnia magna (Water flea)	1.05 mg/l	48 h
Cinnamal	EC50	Daphnia magna (Water flea)	3.86 mg/l	48 h
CLOVE OIL	No data available			
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-	EC50 Read-	Daphnia magna (Water flea)	36.79 mg/l	48 h

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	across (Analogy) NOEC Read- across (Analogy)	Daphnia magna	5.9 mg/l	21 d
OILS, CINNAMON	No data available			
Isoeugenol	No data available			

Toxicity to aquatic plants

Components	End point	Species	Value	Exposure time
Orange oils	No data available			
d-Limonene	static test NOEC OECD Test Guideline 201	Pseudokirchneriella subcapitata (green algae)	0.05 mg/l	72 h
Eugenol	static test EC50	Desmodesmus subspicatus (green algae)	24 mg/l	72 h
Cinnamal	Static EC50	Selenastrum capricornutum, Skeletonema costatum	6.87 mg/l	72 h
CLOVE OIL	No data available			
BENZALDEHYDE, 3- ETHOXY-4-HYDROXY-	ErC50 Read- across (Analogy)	Pseudokirchneriella subcapitata (green algae)	120 mg/l	72 h

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OILS, CINNAMON	No data available			
Isoeugenol	No data available			

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Orange oils	77 %	28 d	Readily biodegradable.
d-Limonene	80 %	28 d	Readily biodegradable.
Eugenol	82 %	28 d	Readily biodegradable.
Cinnamal	86 %	28 d	Readily biodegradable.
CLOVE OIL	No data available		
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-	No data available		
OILS, CINNAMON	No data available		
Isoeugenol	79 %	28 d	Readily biodegradable.

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n-Octanol/water (log)
Orange oils	No data available	No data available
d-Limonene	1,022 QSAR	4.38
Eugenol	No data available	1.83
Cinnamal	8.33 QSAR	1.83
CLOVE OIL	No data available	No data available
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-	No data available	1.61
OILS, CINNAMON	No data available	No data available
Isoeugenol	47	2.1 Measured

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Mobility

Component	End point	Value
Orange oils	No data available	
d-Limonene	Koc	6324
Eugenol	log Koc	2.2
Cinnamal	Koc	36.82 Calculated
CLOVE OIL	No data available	
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-		-
OILS, CINNAMON	No data available	
Isoeugenol	No data available	

PBT and vPvB assessment

Component	Results
Orange oils	Not fulfilling PBT and vPvB criteria
d-Limonene	Not fulfilling PBT and vPvB criteria
Eugenol	Not fulfilling PBT and vPvB criteria
Cinnamal	Not fulfilling PBT and vPvB criteria
CLOVE OIL	Not fulfilling PBT and vPvB criteria
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-	Not fulfilling PBT and vPvB criteria
Isoeugenol	Not fulfilling PBT and vPvB criteria

Other adverse effects : None known.

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13. DISPOSAL CONSIDERATIONS

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.

Land transport

Not classified as dangerous in the meaning of transport regulations.

Sea transport

Not classified as dangerous in the meaning of transport regulations.

Air transport

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

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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16. OTHER INFORMATION

HMIS Ratings

Health	2
Flammability	1
Reactivity	-

NFPA Ratings

Health	2
Fire	1
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 & Regulatory Affairs (GSARA)
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