

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



STEM ZONE REPELLENT STARTER KIT/4 US

Version 1.0

Print Date 06/23/2026

Revision Date 04/21/2025

SDS Number 350000046904
GEN_SOF Number 82938

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : STEM ZONE REPELLENT STARTER KIT/4 US

Recommended use : Insect Repellent

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
Skin irritation	Category 2	Causes skin irritation.
Serious eye damage	Category 1	Causes serious eye damage.
Skin sensitisation	Category 1B	May cause an allergic skin reaction.
Aspiration hazard	Category 1	May be fatal if swallowed and enters airways.

Labelling

Hazard symbols

Corrosion
Exclamation mark
Health hazard

Signal word

Danger

Hazard statements

Causes skin irritation.
Causes serious eye damage.

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May cause an allergic skin reaction.
May be fatal if swallowed and enters airways.

Precautionary statements

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

Keep out of reach of children.

Read label before use.

Immediately call a POISON CENTER/doctor.

Specific treatment (see supplemental first aid instructions on this label).

IF ON SKIN: Wash with plenty of soap and water.

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

Do NOT induce vomiting.

Take off contaminated clothing and wash before reuse.

Store locked up.

Dispose of contents/ container to an approved incineration plant.

Wear protective gloves/ eye protection/ face protection.

Avoid breathing spray.

Wash hands thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Weight percent
Geraniol	106-24-1	10.00 - 30.00
Citronella oil	8000-29-1	10.00 - 30.00
LEMONGRASS OIL	8007-02-1	10.00 - 30.00
CLOVE OIL	8000-34-8	5.00 - 10.00

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.

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Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

- Skin contact** : Wash off with plenty of water. Take off contaminated clothing and wash before reuse. If you suspect a reaction to this product, discontinue use and remove contaminated clothing. If skin irritation or rash occurs: Get medical advice/ attention.
- Inhalation** : No special requirements.
- Ingestion** : IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Specific hazards during firefighting** : 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. 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** : 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** : Dike large spills.
Clean residue from spill site.

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cleaning up

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.
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

: Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers

: Keep container closed when not in use.
Keep away from food, drink and animal feedingstuffs.
Keep in a dry, cool and well-ventilated place.
Store locked up.

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

: Substantial amounts of mist/vapors can be controlled with local exhaust ventilation or respiratory protection.
Do not spray in enclosed areas.

Hand protection

: Wear suitable gloves.

Eye protection

: Wear splash-resistant Chemical goggles.

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 : liquid

Color : light yellow to transparent

Odor : Functional

Odour Threshold : Test not applicable for this product type

pH : Test not applicable for this product type

Melting point/freezing point : 5 °F

Initial boiling point and boiling range : 229 °C

Flash point : > 93 °C
> 199.4 °F
Method: Tag Closed Cup (TCC)

Evaporation rate : Test not applicable for this product type

Flammability (solid, gas) : The product is not flammable.

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

Vapour pressure : estimated 0.03 hPa

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Vapour density	: Test not applicable for this product type	
Relative density	: 0.877 g/cm ³	
Solubility(ies)	: partly miscible	
Partition coefficient: n-octanol/water	: Pow: estimated3.56	
Auto-ignition temperature	: Test not applicable for this product type	
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. %)*	: 5 % - 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.

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- Possibility of hazardous reactions** : Stable under recommended storage conditions.
- Conditions to avoid** : Direct sources of heat.
- Incompatible materials** : None known.
- Hazardous decomposition products** : Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

- Emergency Overview** : Danger
- 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
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 irritation	Category 2	-
Serious eye damage	Category 1	-

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Skin sensitisation	Category 1B	-
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	Category 1	-

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
Geraniol	static test LC50 OECD Test Guideline 203	Danio rerio (zebra fish)	22 mg/l	96 h

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Citronella oil	No data available			
LEMONGRASS OIL	No data available			
CLOVE OIL	No data available			

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Geraniol				
Citronella oil	EC50 OECD Test Guideline 202	Daphnia magna (Water flea)	20.5 mg/l	48 h
LEMONGRASS OIL	EC50	Daphnia magna (Water flea)	27 mg/l	48 h
CLOVE OIL	No data available			

Toxicity to aquatic plants

Components	End point	Species	Value	Exposure time
Geraniol	static test EC50	Desmodium subspicatus (green algae)	13.9 mg/l	72 h

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	Nominal OECD Test Guideline 201			
Citronella oil	EC50	Pseudokirchneriella subcapitata (green algae)	5.79 mg/l	72 h
LEMONGRASS OIL	No data available			
CLOVE OIL	No data available			

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Geraniol	82 %	28 d	Readily biodegradable.
Citronella oil	No data available		Inherently biodegradable.
LEMONGRASS OIL	No data available		
CLOVE OIL	No data available		

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n- Octanol/water (log)
Geraniol	No data available	2.6
Citronella oil	No data available	No data available
LEMONGRASS OIL	No data available	No data available
CLOVE OIL	No data available	No data available

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Mobility

Component	End point	Value
Geraniol	Koc	70.79
Citronella oil	No data available	
LEMONGRASS OIL	No data available	
CLOVE OIL	No data available	

PBT and vPvB assessment

Component	Results
Geraniol	Not fulfilling PBT and vPvB criteria
Citronella oil	Not fulfilling PBT and vPvB criteria
LEMONGRASS OIL	Not fulfilling PBT and vPvB criteria
CLOVE OIL	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 or identification number	3082	3082	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Geraniol, Citronella Oil)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Geraniol, Citronella Oil)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Geraniol, Citronella Oil)
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	-	Marine pollutant	-
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 that qualifies for exemption from regulation under the Federal Insecticide, Fungicide, and Rodenticide Act and has not been registered by the Environmental Protection Agency. It is subject to certain labeling requirements, and these requirements may 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:

Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA)

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Chemical Substance Inventory.

California Prop. 65

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

16. OTHER INFORMATION

HMIS Ratings

Health	3
Flammability	1
Reactivity	0

NFPA Ratings

Health	3
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.

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The affected product contains nonylphenol ethoxylates (NPEs) and propylene glycol (PG), which are not identified in the accompanying SDS. Therefore, the SDS does not represent the composition of the affected product and should not be relied upon as a complete description of the recalled material.

The SDS may continue to be used as general guidance for handling, storage, transportation, spill response, and disposal. Customers should consult their waste management provider and applicable local, state, and federal requirements when determining appropriate transportation and disposal methods.

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