SAFETY DATA SHEET
ZEP MULTI-USE FRESHEN ODOR ELIMINATOR CONC LAVENDER

SECTION 1. IDENTIFICATION

Product name : ZEP MULTI-USE FRESHEN ODOR ELIMINATOR & DISINFECTANT LAVENDAR
:

Manufacturer or supplier's details

Company : Zep, Inc.
360 Joe Frank Harris Pkwy
Emerson, GA 30137
USA

Telephone : Compliance Services - 877-428-9937
E-mail address : compliance.services@zep.com

Emergency telephone number : For incidents only (spill, leak, fire, exposure, or accident), call CHEMTREC: 800-424-9300 - All Calls Recorded

In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Biocides

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture according to US Regulation 29 CFR 1910.1200

GHS label elements

Not a hazardous substance or mixture according to US Regulation 29 CFR 1910.1200 and the Canadian HPA.
Based on available data, the classification criteria are not met.Handle in accordance with good industrial hygiene and safety practice.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P262 Do not get in eyes, on skin, or on clothing.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P314 Get medical advice/ attention if you feel unwell.
Storage:
P402 + P404 Store in a dry place. Store in a closed container.
P410 + P403 Protect from sunlight. Store in a well-ventilated place.
Disposal:
P501 Dispose of contents/container in accordance with local regulation.

Other hazards

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 1 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical name / Synonyms	CAS-No.	Concentration (% w/w)
Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	1 - 5
Propan-2-ol ;Isopropanol	67-63-0	1 - 5

SECTION 4. FIRST AID MEASURES

If inhaled	:	Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	:	After contact with skin, wash immediately with plenty of soap and water. In the case of skin irritation or allergic reactions see a physician.
In case of eye contact	:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed	:	If accidentally swallowed obtain immediate medical attention. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Dry powder Water spray Foam
Further information	:	Use water spray to cool unopened containers.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use respirator when performing operations involving potential exposure to vapour of the product.
Environmental precautions	:	Prevent product from entering drains.
Methods and materials for containment and cleaning up	:	Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Take precautionary measures against static discharges.

Advice on safe handling	:	Provide sufficient air exchange and/or exhaust in work rooms.
Conditions for safe storage	:	Keep tightly closed in a dry and cool place.
Further information on storage conditions	:	Storage temperature: < 60°C.
Technical measures/Precautions	:	Storage temperature: < 60°C.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		REL	400 ppm 980 mg/m3	NIOSH/GUIDE
		STEL	500 ppm 1,225 mg/m3	NIOSH/GUIDE
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		REL	400 ppm 980 mg/m3	NIOSH/GUIDE
		STEL	500 ppm 1,225 mg/m3	NIOSH/GUIDE

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	Sampling time: End of shift at end of work week.	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection	:	In the case of vapour formation use a respirator with an approved filter.
Hand protection		
Material	:	Nitrile rubber
Rate of permeability	:	> 480 min
Eye protection	:	Tightly fitting safety goggles
Skin and body protection	:	Choose body protection according to the amount and concentration of the dangerous substance at the work place. No special protective equipment required.
Hygiene measures	:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid

Colour	:	clear, yellow, Color depends on dye added
Odour	:	Varies with fragrance added
Odour Threshold	:	no data available
pH	:	no data available
Melting point/range	:	no data available
Boiling point/boiling range	:	no data available
Flash point	:	210.00 °F / 98.89 °C
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Flammability (liquids)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	no data available
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	:	None known. Stable
Conditions to avoid	:	None known.
Incompatible materials	:	None known.
Hazardous decomposition products	:	Thermal decomposition can lead to release of irritating gases and vapours.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Eyes Skin Inhalation Ingestion

Acute toxicity

Acute oral toxicity	:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Carcinogenicity

IARC Human carcinogen.

	Propan-2-ol 67-63-0 No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Further information

Remarks: Information given is based on data on the components and the toxicology of similar products.

The following toxicological data refer to:

Alkyl (C12-16) dimethylbenzyl ammonium chloride(CAS-No.: 68424-85-1)

Acute toxicity

Acute oral toxicity	:	LD50 (Rat): ca. 344 mg/kg GLP: no
Acute dermal toxicity	:	LD50 (Rabbit, male and female): 3,412 mg/kg Method: OPPTS 870.1200 GLP: no

Skin corrosion/irritation

Species: Rabbit
Exposure time: 4 h
Method: DOT
Result: Corrosive
GLP: no

Respiratory or skin sensitisation

Test Type: Buehler Test
Species: Guinea pig
Assessment: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406
Result: not sensitizing
GLP: yes

Germ cell mutagenicity

Genotoxicity in vitro	:	Test Type: Ames test Species: Salmonella typhimurium Metabolic activation: yes Method: OECD Test Guideline 471 Result: not mutagenic GLP: yes
	:	Test Type: Chromosome aberration test in vitro Species: Human lymphocytes

Metabolic activation: yes
Method: OECD Test Guideline 473
Result: non clastogenic
GLP: yes

: Test Type: gene mutation test
Species: Chinese hamster ovary cells
Metabolic activation: yes
Method: OECD Test Guideline 476
Result: not mutagenic
GLP: yes

: Test Type: unscheduled DNA synthesis assay
Species: rat hepatocytes
Method: OECD Test Guideline 482
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse (male and female)
Cell type: Bone marrow
Application Route: oral (gavage)
Method: OECD Test Guideline 474
Result: not mutagenic
GLP: yes

Reproductive toxicity

Effects on fertility : Test Type: Two-generation study
Species: Rat, female
Application Route: Ingestion
Dose: 0-300-1000-2000 ppm
General Toxicity - Parent: NOAEL: 67 - 106 mg/kg body weight
General Toxicity F1: 54 - 86 mg/kg body weight
General Toxicity F2: NOAEL: 54 - 86 mg/kg body weight
Fertility: NOAEL: 112 - 161 mg/kg body weight
Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility.
GLP: yes

Test Type: Two-generation study
Species: Rat, male
Application Route: Ingestion
Dose: 0-300-1000-2000 ppm
General Toxicity - Parent: NOAEL: 51 - 102 mg/kg body weight
General Toxicity F1: NOAEL: 41 - 83 mg/kg body weight
General Toxicity F2: NOAEL: 41 - 83 mg/kg body weight
Fertility: NOAEL: 139 - 198 mg/kg body weight
Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility.
GLP: yes

Effects on foetal development : Species: Rat
Strain: Sprague-Dawley
Application Route: Oral
Dose: 0-10-30-100 milligram per kilogram
General Toxicity Maternal: NOEL: 8.1 mg/kg bw/day
Developmental Toxicity: NOAEL: 81 mg/kg body weight

Method: OECD Test Guideline 414
Result: No effects on fertility and early embryonic development were detected.
GLP: yes

Repeated dose toxicity

Species: Dog, female
NOAEL: 45 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposures: daily
Dose: 0-500-1500-3000 ppm

Species: Dog, male
NOAEL: 50 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposures: daily
Dose: 0-500-1500-3000 ppm

Species: Rat, male
NOAEL: 31 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposures: daily
Dose: 0-6-31-62 mg/kg
Method: OECD Test Guideline 408
GLP: yes

Species: Rat, female
NOAEL: 38 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposures: daily
Dose: 0-8-38-77 mg/kg
Method: OECD Test Guideline 408
GLP: yes

The following toxicological data refer to:

Nonylphenol branched ethoxylated(CAS-No.: 127087-87-0)

The following toxicological data refer to:

Propan-2-ol(CAS-No.: 67-63-0)

Acute toxicity

Acute oral toxicity	:	LD50 (Rat): 5,840 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): > 25,000 mg/m3 Test atmosphere: vapour

Method: OECD Test Guideline 403

LC50 (Rat): 37.5 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): 13,900 mg/kg
Method: OECD Test Guideline 402

LD50 (Rat): 16,4 ml/kg bw
Method: OECD Test Guideline 402

Skin corrosion/irritation

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Species: Rabbit
Result: Eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

Germ cell mutagenicity

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse (male and female)
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Carcinogenicity

Species: Rat, (male and female)
Application Route: Inhalation
5,000 ppm
Method: OECD Test Guideline 451
GLP: yes

Reproductive toxicity

Species: Rat, male and female
Application Route: Oral
General Toxicity - Parent: NOAEL: 347 mg/kg body weight
Fertility: NOAEL: 853 mg/kg body weight
Method: OECD Test Guideline 415
GLP: yes
Remarks: No significant adverse effects were reported

Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
General Toxicity - Parent: NOAEL: 500 mg/kg body weight

Fertility: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 416
GLP: yes
Remarks: No significant adverse effects were reported

STOT - single exposure

Target Organs: Central nervous system
Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Remarks: no data available

Repeated dose toxicity

Species: Rat
NOAEC: 12500 mg/m³
Application Route: Inhalation
Test atmosphere: vapour
Exposure time: 90 d

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

Components:

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Partition coefficient: n-octanol/water : log Pow: 2.75 (20 °C)
Method: OECD Test Guideline 107
GLP: yes

Propan-2-ol:

Partition coefficient: n-octanol/water : log Pow: 0.05 (25 °C)

Mobility in soil

no data available

Other adverse effects

Additional ecological information : There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.
Contaminated packaging : Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT	:	Not dangerous goods
UN number	:	Not applicable
Proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
TDG	:	Not dangerous goods
UN number	:	Not applicable
Proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
IATA		Not dangerous goods
UN number	:	Not applicable
Proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
IMDG		Not dangerous goods
UN number	:	Not applicable
Proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
ADR	:	Not dangerous goods
UN number	:	Not applicable
Proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
RID	:	Not dangerous goods
UN number	:	Not applicable
Proper shipping name	:	Not applicable
Transport hazard class	:	Not applicable
Packing group	:	Not applicable
Special precautions for user	:	none
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	:	Not applicable

SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals.

EPA Registration number : 6836-165
Signal word : DANGER!
Hazard statements : Harmful if inhaled.
Corrosive - causes irreversible eye damage.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

SARA 313

Components	CAS-No.	Concentration
Propan-2-ol	67-63-0	%

US State Regulations

Massachusetts Right To Know

Components	CAS-No.
Propan-2-ol	67-63-0

Pennsylvania Right To Know

Components	CAS-No.
Propan-2-ol	67-63-0

New Jersey Right To Know

Components	CAS-No.
Propan-2-ol	67-63-0

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	US. ACGIH Threshold Limit Values
ACGIH BEI	:	US. ACGIH. BEIs. Biological Exposure Indices, as amended
NIOSH/GUIDE	:	US. NIOSH: Pocket Guide to Chemical Hazards, as amended

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 2-14-2025

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

: