

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP O.J.

Material number : 000000000000077135

**Manufacturer or supplier's details**

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

Telephone : Compliance Services - 877-428-9937

#### Emergency telephone numbers

**For SDS Information** : Compliance Services - 877-428-9937

**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded

**For a Transportation Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.  
In the District of Columbia 202-483-7616

**Recommended use of the chemical and restrictions on use**

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	liquid
Colour	amber
Odour	characteristic

#### GHS Classification

Flammable liquids : Category 3

Skin corrosion : Category 1


Serious eye damage : Category 1


Skin sensitisation : Category 1


Carcinogenicity : Category 2


#### GHS label elements

Hazard pictograms :

  
Flame

  
Health hazard

  
Corrosion

  
Exclamation mark

Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H351 Suspected of causing cancer.

Precautionary statements : **Prevention:**

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P363 Wash contaminated clothing before reuse.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
**Storage:**  
P403 + P235 Store in a well-ventilated place. Keep cool.  
**Disposal:**  
P501 Dispose of contents/container in accordance with local regulation.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration [%]
Nonylphenol, ethoxylated, phosphate ester, sodium salt	37340-60-6	>= 10 - < 30
sodium dodecylbenzenesulfonate	25155-30-0	>= 5 - < 10
d-limonene	5989-27-5	>= 5 - < 10

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

(2-methoxymethylethoxy)propanol (Mixture of isomers)	34590-94-8	$\geq 1 - < 5$
1-butoxypropan-2-ol	5131-66-8	$\geq 1 - < 5$
Sodium metasilicate (disodium salt)	6834-92-0	$\geq 1 - < 5$
Amides, coco, N,N-bis(hydroxyethyl)	68603-42-9	$\geq 1 - < 5$
2,2'-iminodiethanol	111-42-2	$\geq 0.1 - < 1$

The exact percentages of disclosed substances are withheld as trade secrets.

### SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.  
Wash off immediately with plenty of water for at least 15 minutes.  
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.  
Rinse immediately with plenty of water for at least 15 minutes.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects are immediate and delayed.  
Symptoms may include blistering, irritation, burns, and pain.  
Chronic effects are delayed and symptoms may not be observed during an exposure.  
Effects are dependent on exposure (dose, concentration, contact time).  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

---

### SECTION 5. FIREFIGHTING MEASURES

- |   |   |   |
|---|---|---|
| Suitable extinguishing media                  | : | Alcohol-resistant foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry chemical   |
| Unsuitable extinguishing media                | : | High volume water jet   |
| Specific hazards during firefighting          | : | Do not allow run-off from fire fighting to enter drains or water courses.   |
| Hazardous combustion products                 | : | Carbon dioxide (CO <sub>2</sub> )<br>Carbon monoxide<br>Smoke<br>Phosphorus compounds<br>Nitrogen oxides (NO <sub>x</sub> )   |
| Specific extinguishing methods                | : | <p>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</p>  |
| Further information                           | : | <p>Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br/>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.<br/>For safety reasons in case of fire, cans should be stored separately in closed containments.<br/>Use a water spray to cool fully closed containers.</p> |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.  |

---

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- |   |   |   |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment.<br>Remove all sources of ignition.<br>Evacuate personnel to safe areas.<br>Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.             |
| Environmental precautions   | : | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains, inform respective authorities.  |
| Methods and materials for containment and cleaning up               | : | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Dispose of rinse water in accordance with local and national regulations.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Do not breathe vapours or spray mist.
- Conditions for safe storage : No smoking.  
Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Do not freeze.  
Store and keep away from, oxidizing agents and acids.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
d-limonene	5989-27-5	TWA	30 ppm	US WEEL
(2-methoxymethylethoxy)propano I (Mixture of isomers)	34590-94-8	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		ST	150 ppm 900 mg/m3	NIOSH REL
		TWA	100 ppm 600 mg/m3	NIOSH REL
		TWA	100 ppm 600 mg/m3	OSHA Z-1
		TWA	100 ppm 600 mg/m3	OSHA P0
		STEL	150 ppm 900 mg/m3	OSHA P0
		STEL	150 ppm 900 mg/m3	CAL PEL
		PEL	100 ppm	CAL PEL

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

2,2'-iminodiethanol	111-42-2	TWA (Inhalable fraction and vapor)	600 mg/m3 1 mg/m3	ACGIH
		TWA	3 ppm 15 mg/m3	NIOSH REL
		TWA	3 ppm 15 mg/m3	OSHA P0
		PEL	0.46 ppm 2 mg/m3	CAL PEL

**Engineering measures** : effective ventilation in all processing areas

### Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material

Remarks

: Protective gloves

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Ensure that eyewash stations and safety showers are close to the workstation location.  
Tightly fitting safety goggles

Skin and body protection

: Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : amber

Odour : characteristic

Odour Threshold : No data available

pH : 13 - 14

Melting point/freezing point : No data available

Boiling point : 98.9 °C

Flash point : 52.2 °C  
Method: closed cup

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

Evaporation rate	: 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: not determined
Relative vapour density	: No data available
Density	: 1.076 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 2258.4 mm <sup>2</sup> /s (20 °C)

---

### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition products	: Carbon oxides Nitrogen oxides (NO <sub>x</sub> ) Phosphorus compounds

---

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Potential Health Effects

Aggravated Medical Condition	: None known.
------------------------------	---------------

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

Symptoms of Overexposure : Effects are immediate and delayed.  
Symptoms may include blistering, irritation, burns, and pain.  
Chronic effects are delayed and symptoms may not be observed during an exposure.  
Effects are dependent on exposure (dose, concentration, contact time).  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
Review section 2 of SDS to see all potential hazards.  
Treat symptomatically. Symptoms may be delayed.

### Carcinogenicity:

<b>IARC</b>	Group 2B: Possibly carcinogenic to humans	
	Amides, coco, N,N-bis(hydroxyethyl)	68603-42-9
	2,2'-iminodiethanol	111-42-2
<b>ACGIH</b>	Confirmed animal carcinogen with unknown relevance to humans	
	2,2'-iminodiethanol	111-42-2
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.	
<b>NTP</b>	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.	

### Acute toxicity

#### Product:

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

#### Components:

##### **sodium dodecylbenzenesulfonate:**

Acute oral toxicity : LD50 Oral Rat: 438 mg/kg

##### **d-limonene:**

Acute oral toxicity : LD50 Oral Rat: 4,400 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: > 5,000 mg/kg

##### **Sodium metasilicate (disodium salt):**

Acute oral toxicity : LD50 Rat: 1,153 mg/kg

### Skin corrosion/irritation

#### Product:

Remarks: Extremely corrosive and destructive to tissue.



# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

### Serious eye damage/eye irritation

**Product:**

Remarks: May cause irreversible eye damage.

### Respiratory or skin sensitisation

**Product:**

Remarks: Causes sensitisation.

**Components:**

**d-limonene:**

Classification: May cause sensitisation by skin contact.

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

### STOT - single exposure

No data available

### STOT - repeated exposure

No data available

### Aspiration toxicity

No data available

### Further information

**Product:**

Remarks: No data available

**Components:**

**Amides, coco, N,N-bis(hydroxyethyl):**

Remarks: No data available

---

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

#### Product:

Partition coefficient: n-octanol/water : Remarks: No data available

#### Components:

##### **d-limonene :**

Partition coefficient: n-octanol/water : log Pow: 4.232

##### **(2-methoxymethylethoxy)propanol (Mixture of isomers) :**

Partition coefficient: n-octanol/water : Pow: 0.0043

##### **1-butoxypropan-2-ol :**

Partition coefficient: n-octanol/water : Pow: 1.2

##### **Amides, coco, N,N-bis(hydroxyethyl) :**

Partition coefficient: n-octanol/water : Remarks: No data available

##### **2,2'-iminodiethanol :**

Partition coefficient: n-octanol/water : Pow: 1.43

### Mobility in soil

No data available

### Other adverse effects

No data available

#### Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life., Harmful to aquatic life with long lasting effects.

The GHS H401 statement "Toxic to aquatic life" noted above is an Acute Aquatic Toxicity Category 2 classification. Although the product has the potential to harm the environment, it is not classified as a marine pollutant or regulated under transportation regulations.

#### Components:

##### **Amides, coco, N,N-bis(hydroxyethyl) :**

Additional ecological : No data available

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

information

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of in accordance with local regulations.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

### SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):  
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IMDG (Vessel):  
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Cargo Air):  
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: IATA (Passenger Air):  
UN3266, Corrosive liquid, basic, inorganic, n.o.s., (SODIUM HYDROXIDE), 8, II

Transportation Regulation: TDG (Canada):  
UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (SODIUM HYDROXIDE), 8, II

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

### SECTION 15. REGULATORY INFORMATION

- TSCA list** : No substances are subject to a Significant New Use Rule.
- No substances are subject to TSCA 12(b) export notification requirements.

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

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium dodecylbenzenesulfonate	25155-30-0	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Respiratory or skin sensitisation  
Carcinogenicity

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### California Prop. 65



WARNING: This product can expose you to chemicals including Amides, coco, N,N-bis(hydroxyethyl), 2,2'-iminodiethanol, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### The components of this product are reported in the following inventories:

**DSL** All components of this product are on the Canadian DSL  
**TSCA** On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

### Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

## SECTION 16. OTHER INFORMATION

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

### Further information

#### NFPA:

HEALTH	3
FLAMMABILITY	2
INSTABILITY	0
SPECIAL HAZARD.	

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme

#### HMIS III:

HEALTH	3*
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

### OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Flammable liquid and vapour. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of causing cancer.

Precautionary statements

: **Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/ lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF

# SAFETY DATA SHEET

## ZEP O.J.

Version 2.2

Revision Date 10/01/2023

Print Date 04/27/2025

INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF exposed or concerned: Get medical advice/ attention. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:** Store in a well-ventilated place. Keep cool.

**Disposal:** Dispose of contents/container in accordance with local regulation.

Version:	2.2
Revision Date:	10/01/2023
Print Date:	04/27/2025

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.