

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP CITRUS CLEANER CLEANER/DEGREASER

Material number : 45547C

Manufacturer or supplier's details

Company : Zep Inc.

Address : 11627 - 178 Street
Edmonton, Alberta T5S 1N6
Canada

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.

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

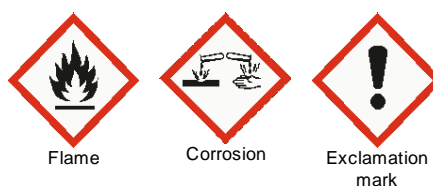
Appearance	liquid
Colour	orange
Odour	citrus

GHS Classification

Flammable liquids : Category 3
Skin corrosion : Category 1C
Serious eye damage : Category 1
Skin sensitisation : Sub-category 1B

GHS label elements

Hazard pictograms :



Signal word : Danger

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

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

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
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.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it 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 [%]
d-limonene	5989-27-5	>= 5 - < 10
propane-1,2-diol	57-55-6	>= 1 - < 5
2-aminoethanol	141-43-5	>= 1 - < 5
2-butoxyethanol	111-76-2	>= 1 - < 5

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

Fatty acids, tall-oil, sodium salts	61790-45-2	>= 1 - < 5
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	>= 1 - < 5
Sodium polyacrylate	9003-04-7	>= 1 - < 5

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.
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Wash clothing before reuse.
If skin irritation persists, call a physician.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
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.
- If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
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.
Effects are dependent on exposure (dose, concentration, contact time).
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

	Carbon dioxide (CO ₂) Dry chemical Water spray
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 ₂) Carbon monoxide Smoke Nitrogen oxides (NO _x) Sulphur oxides
Specific extinguishing methods	: Do not allow run-off from fire fighting to enter drains or water courses.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
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. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains, inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material. 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).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes.
-------------------------	---

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

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.
 Open drum carefully as content may be under pressure.
 To avoid spills during handling keep bottle on a metal tray.
 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.

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 store near acids.
 Oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane-1,2-diol	57-55-6	TWA (Vapour and aerosols)	50 ppm 155 mg/m3	CA ON OEL
		TWA (aerosol)	10 mg/m3	CA ON OEL
2-aminoethanol	141-43-5	STEL	6 ppm 15 mg/m3	CA AB OEL
		TWA	3 ppm 7.5 mg/m3	CA AB OEL
		TWA	3 ppm	CA BC OEL
		STEL	6 ppm	CA BC OEL
		TWAEV	3 ppm 7.5 mg/m3	CA QC OEL
		STEV	6 ppm 15 mg/m3	CA QC OEL
2-butoxyethanol	111-76-2	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	20 ppm 97 mg/m3	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	20 ppm 97 mg/m3	CA QC OEL

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

		TWA	20 ppm	ACGIH
--	--	-----	--------	-------

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200 mg/g Creatinine	ACGIH BEI

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 : Protective gloves

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

Eye protection : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

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 : orange

Odour : citrus

Odour Threshold : No data available

pH : 11.2 - 11.8

Melting point/freezing point : No data available

Boiling point : No data available

Flash point : > 51 °C

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

Evaporation rate	: 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 0.04 hPa
Density	: 1.01 g/cm ³
Solubility(ies)	
Water solubility	: completely soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition products	: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain. Effects are dependent on exposure (dose, concentration, contact time). Causes severe skin burns and eye damage.

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

May cause an allergic skin reaction.
Review section 2 of SDS to see all potential hazards.
Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC

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.

Acute toxicity

Product:

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

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

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

Components:

d-limonene:

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

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

2-aminoethanol:

Acute oral toxicity : LD50 Oral Mouse: 700 mg/kg

LD50 Oral Rat: 1,515 mg/kg

Acute inhalation toxicity : LC50 Mouse: > 1.21 mg/l

2-butoxyethanol:

Acute oral toxicity : LD50 Oral Rat: 880 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: 1,060 mg/kg

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

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: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

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

Components:

d-limonene :

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

Partition coefficient: n-octanol/water : log Pow: 4.232
propane-1,2-diol :
Partition coefficient: n-octanol/water : log Pow: -1.07
2-aminoethanol :
Partition coefficient: n-octanol/water : log Pow: -1.31

Mobility in soil

No data available

Other adverse effects

No data available

Product:

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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
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 (TDG) / Règlement Pour Le Transport (TMD): (Canada): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
--

Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel): UN1993, FLAMMABLE LIQUID, N.O.S., (D-LIMONENE), 3, III

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air):
--

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

UN1993, Flammable liquid, n.o.s., (D-LIMONENE), 3, III

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air):
UN1993, Flammable liquid, n.o.s., (D-LIMONENE), 3, III

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA):
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under Transport Dangerous Goods (TDG) Canada 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

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

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

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

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

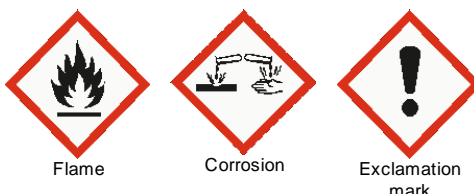
Inventory Acronym and Validity Area Legend:

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

SECTION 16. OTHER INFORMATION

WHMIS - 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.

Precautionary statements : **Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and

SAFETY DATA SHEET

ZEP CITRUS CLEANER CLEANER/DEGREASER

Version 1.1

Revision Date 10/01/2023

Print Date 08/06/2024

receiving equipment. Use explosion-proof electrical/ ventilating/ lighting equipment. Use non-sparking tools. Take action to prevent static discharges. 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 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 skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash it 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:	1.1
Revision Date:	10/01/2023
Print Date:	08/06/2024

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.