

ZEP 45 NC OBS

Version 2.0

Revision Date 01/05/2018

Print Date 07/24/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP 45 NC OBS
 Material number : 00000000000014901

Manufacturer or supplier's details

Company : Zep Inc.
 Address : 350 Joe Frank Harris Parkway, SE
 Emerson, GA 30137
 Telephone : 404-352-1680

Emergency telephone numbers

For SDS Information	: Compliance Services 1-877-428-9937
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

Recommended use : Lubricant

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	Aerosol containing a compressed gas
Colour	amber
Odour	solvent-like

GHS Classification

Flammable aerosols : Category 1
 Gases under pressure : Compressed gas
 Skin irritation : Category 2
 Eye irritation : Category 2A
 Skin sensitisation : Category 1
 Carcinogenicity : Category 2

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.
 H280 Contains gas under pressure; may explode if heated.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.

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H351 Suspected of causing cancer.

Precautionary statements

: **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P251 Pressurized container: Do not pierce or burn, even after use.

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:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

P403 Store in a well-ventilated place.

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 [%]
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 20 - < 30
Solvent naphtha (petroleum), medium aliph. ethanol	64742-88-7	>= 10 - < 20
Distillates (petroleum), straight-run middle 1,2,4-trimethylbenzene	64-17-5	>= 5 - < 10
Aromatic Hydrocarbons (C9 - C10)	64741-44-2	>= 5 - < 10
2-(2-butoxyethoxy)ethanol	95-63-6	>= 5 - < 10
carbon dioxide	Not Assigned	>= 1 - < 5
pentyl acetate	112-34-5	>= 1 - < 5
2-methylbutyl acetate	124-38-9	>= 1 - < 5
mesitylene	628-63-7	>= 1 - < 5
	624-41-9	>= 1 - < 5
	108-67-8	>= 1 - < 5

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cumene	98-82-8	>= 0.1 - < 1
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The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
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.
Consult a physician after significant exposure.
- In case of skin contact : If skin irritation persists, call a physician.
Wash off immediately with plenty of water for at least 15 minutes.
If on clothes, remove clothes.
Wash contaminated clothing before re-use.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
- If swallowed : Keep respiratory tract clear.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
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 irritation, redness, pain, and rash.
Chronic effects are delayed and symptoms may not be observed during an exposure.
Effects are dependent on exposure (dose, concentration, contact time).
Causes skin irritation.
Causes serious eye irritation.
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
Carbon dioxide (CO₂)
Dry chemical
Water spray jet
- Unsuitable extinguishing : High volume water jet

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- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 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.
Ensure adequate ventilation.
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 (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up or vacuum up spillage and collect in suitable container for disposal.

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.
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

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be employed in any process in which this mixture is being used.

Do not breathe vapours or spray mist.

Always replace cap after use.

Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
No smoking.
Keep in a dry, cool and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : 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
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	TWA (Mist)	5 mg/m ³	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m ³	ACGIH
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m ³	OSHA P0
		STEL	1,000 ppm	ACGIH
		PEL	1,000 ppm 1,900 mg/m ³	CAL PEL
1,2,4-trimethylbenzene	95-63-6	TWA	25 ppm 125 mg/m ³	NIOSH REL
2-(2-butoxyethoxy)ethanol	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH
carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m ³	NIOSH REL
		ST	30,000 ppm 54,000 mg/m ³	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m ³	OSHA Z-1
		TWA	10,000 ppm	OSHA P0

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			18,000 mg/m3	
		STEL	30,000 ppm 54,000 mg/m3	OSHA P0
		PEL	5,000 ppm 9,000 mg/m3	CAL PEL
		STEL	30,000 ppm 54,000 mg/m3	CAL PEL
pentyl acetate	628-63-7	TWA	100 ppm 525 mg/m3	NIOSH REL
		TWA	100 ppm 525 mg/m3	OSHA Z-1
		TWA	100 ppm 525 mg/m3	OSHA P0
2-methylbutyl acetate	624-41-9	TWA	50 ppm	ACGIH
		STEL	100 ppm	ACGIH
mesitylene	108-67-8	TWA	25 ppm 125 mg/m3	NIOSH REL
		TWA	25 ppm	ACGIH
		TWA	25 ppm 125 mg/m3	OSHA P0
		PEL	25 ppm 125 mg/m3	CAL PEL
cumene	98-82-8	TWA	50 ppm	ACGIH
		TWA	50 ppm 245 mg/m3	NIOSH REL
		TWA	50 ppm 245 mg/m3	OSHA Z-1
		TWA	50 ppm 245 mg/m3	OSHA P0
		PEL	50 ppm 245 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

: Nitrile rubber

Remarks

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

Neoprene

Rubber gloves

Eye protection

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

Safety glasses

Skin and body protection

: Impervious clothing

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

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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 : Aerosol containing a compressed gas

Colour : amber

Odour : solvent-like

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point : 179.44 °C

Flash point :
No data available

Evaporation rate : < 1
n-Butyl Acetate = 1.0

Flammability (solid, gas) : Extremely flammable aerosol.

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : not determined

Relative vapour density : No data available

Density : 0.845 g/cm³

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : not determined

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

Auto-ignition temperature : not determined

Thermal decomposition : No data available

Viscosity

Viscosity, kinematic : No data available

Heat of combustion : 36.09 kJ/g

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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. Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Carbon monoxide Carbon dioxide (CO ₂)

SECTION 11. TOXICOLOGICAL INFORMATION
Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are immediate and delayed. Symptoms may include irritation, redness, pain, and rash. Chronic effects are delayed and symptoms may not be observed during an exposure. Effects are dependent on exposure (dose, concentration, contact time).

Carcinogenicity:

IARC	Group 2B: Possibly carcinogenic to humans	
ACGIH	cumene	98-82-8
	Confirmed animal carcinogen with unknown relevance to humans	
	ethanol	64-17-5
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	Reasonably anticipated to be a human carcinogen	
	cumene	98-82-8

Acute toxicity
Product:

Acute inhalation toxicity	: Acute toxicity estimate : 23.56 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
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Components:**Distillates (petroleum), hydrotreated heavy naphthenic:**

Acute oral toxicity : LD50 Rat: > 5,000 mg/kg

Acute inhalation toxicity : LC50 Rat: > 5 mg/l
Exposure time: 4 h

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

ethanol:

Acute oral toxicity : LD50 Oral Rat: 7,060 mg/kg

Acute inhalation toxicity : LC50 Rat: 124.7 mg/l
Exposure time: 4 h
Test atmosphere: vapour**Skin corrosion/irritation****Product:**

Remarks: Irritating to skin.

Serious eye damage/eye irritation**Product:**

Remarks: Severe eye irritation

Respiratory or skin sensitisation**Product:**

Remarks: Causes sensitisation.

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

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Product:

Remarks: No data available

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

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

Components:**ethanol :**

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

2-(2-butoxyethoxy)ethanol :

Partition coefficient: n-octanol/water : Pow: 1

pentyl acetate :

Partition coefficient: n-octanol/water : log Pow: 2.3

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 : No data available

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

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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: 49 CFR (USA):
ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air):
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):
UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):
UN1950, AEROSOLS, FLAMMABLE, 2.1, (LQ), - Limited quantity

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

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CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
xylenes	1330-20-7	100	*

*: 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)
 Gases under pressure
 Serious eye damage or eye irritation
 Respiratory or skin sensitisation
 Skin corrosion or irritation
 Carcinogenicity

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

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

1,2,4-trimethylbenzene	95-63-6	6.368 %
2-(2-butoxyethoxy)ethanol	112-34-5	3.9893 %
2-butoxyethanol	111-76-2	0.0608 %

California Prop. 65

WARNING: This product can expose you to chemicals including cumene, ethylbenzene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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

DSL This product contains one or more components that are listed on the Canadian NDSL. All other components 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

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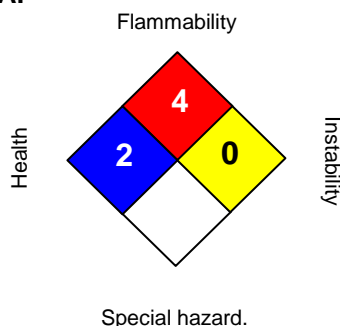
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Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	4
PHYSICAL HAZARD	3

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

OSHA - GHS Label Information:

Hazard pictograms



Signal word

: **Danger:**

Hazard statements

: Extremely flammable aerosol. Contains gas under pressure; may explode if heated.
Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
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/sparks/open flames/hot surfaces. No smoking. Pressurized container: Do not pierce or burn, even after use. 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 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. IF exposed or concerned: Get medical advice/ attention. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.
Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a well-ventilated place.
Disposal: P501: Dispose of contents/container in accordance with local regulation.

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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.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next

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Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.