

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Material number : 000000000000174016

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	Aerosol containing a compressed gas
Colour	brown
Odour	characteristic

GHS Classification

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

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : 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.
H350 May cause cancer.

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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 + P403 Protect from sunlight. Store in a well-ventilated place.
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 [%]
tetrachloroethylene	127-18-4	>= 30 - < 50
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 20 - < 30
Distillates (petroleum), straight-run middle	64741-44-2	>= 5 - < 10
2-(2-butoxyethoxy)ethanol	112-34-5	>= 3 - < 5
carbon dioxide	124-38-9	>= 1 - < 3
pentyl acetate	628-63-7	>= 1 - < 3
2-methylbutyl acetate	624-41-9	>= 1 - < 3

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.

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

	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	: Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If symptoms persist, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: DO NOT induce vomiting unless directed to do so by a physician or poison control center. Keep respiratory tract clear. 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. Effects are dependent on exposure (dose, concentration, contact time). Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause cancer. 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	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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 Chlorine compounds
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

- 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.
- 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.
- 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 : Do not breathe vapours or spray mist.
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.
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.
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.
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

SAFETY DATA SHEET**ZEP 45 PENETRATING LUBRICANT 20N17_12CT**

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
tetrachloroethylene	127-18-4	TWA	25 ppm	ACGIH
		STEL	100 ppm	ACGIH
		TWA	100 ppm	OSHA Z-2
		CEIL	200 ppm	OSHA Z-2
		Peak	300 ppm	OSHA Z-2
		TWA	25 ppm 170 mg/m3	OSHA P0
		STEL	100 ppm 685 mg/m3	CAL PEL
		C	300 ppm	CAL PEL
		PEL	25 ppm 170 mg/m3	CAL PEL
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
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/m3	NIOSH REL
		ST	30,000 ppm 54,000 mg/m3	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m3	OSHA Z-1
		TWA	10,000 ppm 18,000 mg/m3	OSHA P0
		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

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
TETRACHLOROETHEN	127-18-4	Tetrachloroe	In blood	Prior to	0.5 mg/l	ACGIH BEI

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

E		thylene		shift (16 hours after exposure ceases)		
TETRACHLOROETHENE		Tetrachloroethylene	In end-exhaled air	Prior to shift (16 hours after exposure ceases)	3.ppm	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

Remarks

: Protective gloves

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

Eye protection

: Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.

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 : Aerosol containing a compressed gas

Colour : brown

Odour : characteristic

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point : No data available

Flash point :
does not flash

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: No data available
Heat of combustion	: 19.61 kJ/g

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	: Oxidizing agents
Hazardous decomposition products	: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Chlorine Phosgene Hydrogen chloride gas

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects are immediate and delayed. Effects are dependent on exposure (dose, concentration, contact time). Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause cancer. Review section 2 of SDS to see all potential hazards.

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC	Group 2A: Probably carcinogenic to humans	
	tetrachloroethylene	127-18-4
ACGIH	Confirmed animal carcinogen with unknown relevance to humans	
	tetrachloroethylene	127-18-4
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	
	tetrachloroethylene	127-18-4

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:

tetrachloroethylene:

Acute oral toxicity : LD50 Oral Rat: 2,629 mg/kg

Acute inhalation toxicity : LC50 Rat: 34,200 mg/l
Exposure time: 8 h

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

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

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Components:

Distillates (petroleum), straight-run middle:

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

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:

tetrachloroethylene :

Partition coefficient: n-octanol/water : log Pow: 3.40

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

octanol/water

2-(2-butoxyethoxy)ethanol :

Partition coefficient: n- : Pow: 1

octanol/water

pentyl acetate :

Partition coefficient: n- : log Pow: 2.3

octanol/water

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.

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):
UN1950, AEROSOLS, 2.2, (6.1), , RQ (TETRACHLOROETHYLENE)

Transportation Regulation: IMDG (Vessel):
UN1950, AEROSOLS, 2.2, (6.1),

Transportation Regulation: IATA (Cargo Air):

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

UN1950, AEROSOLS, NON-FLAMMABLE, CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP III, 2.2, (6.1),

Transportation Regulation: IATA (Passenger Air):
UN1950, AEROSOLS, NON-FLAMMABLE, CONTAINING SUBSTANCES IN DIVISION 6.1, PACKING GROUP III, 2.2, (6.1),

Transportation Regulation: TDG (Canada):
UN1950, AEROSOLS, 2.2, (6.1),

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
tetrachloroethylene	127-18-4	100	212

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : Gases under pressure
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 : The following components are subject to reporting levels established by SARA Title III, Section 313:

tetrachloroethylene	127-18-4	47 %
2-(2-butoxyethoxy)ethanol	112-34-5	4.46 %

California Prop. 65

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025



WARNING: This product can expose you to chemicals including tetrachloroethylene, benzene, which is/are known to the State of California to cause cancer, and benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to 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 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

Further information

NFPA:

HEALTH	2
FLAMMABILITY	2
INSTABILITY	0
SPECIAL HAZARD.	

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

HMIS III:

HEALTH	2*
FLAMMABILITY	2
PHYSICAL HAZARD	3

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

OSHA - GHS Label Information:

Hazard pictograms



Gas cylinder

Health hazard

Exclamation mark

Signal word

: **Danger:**

Hazard statements

: Contains gas under pressure; may explode if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause cancer.

Precautionary statements

:
Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Store in a well-ventilated place. Store in a well-

SAFETY DATA SHEET

ZEP 45 PENETRATING LUBRICANT 20N17_12CT

Version 1.0

Revision Date 02/19/2025

Print Date 04/27/2025

ventilated place.

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

Version:	1.0
Revision Date:	02/19/2025
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.