

SAFETY DATA SHEET

ZEP DRY GRAPHITE

Version 1.2

Revision Date 10/01/2023

Print Date 04/27/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP DRY GRAPHITE

Material number : 16401C

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	Aerosol containing a liquefied gas
Colour	dark grey
Odour	solvent-like

GHS Classification

Flammable aerosols : Category 2
Gases under pressure : Liquefied gas
Skin irritation : Category 2
Eye irritation : Category 2A
Carcinogenicity : Category 1B
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

GHS label elements

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Hazard pictograms

:



Flame



Gas cylinder



Health hazard



Exclamation mark

Signal word

: Danger

Hazard statements

: H223 Flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H350 May cause 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
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.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it 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

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Hazardous components

Chemical name	CAS-No.	Concentration [%]
trichloroethylene	79-01-6	$\geq 45 - < 70$
propane	74-98-6	$\geq 10 - < 30$
butane	106-97-8	$\geq 10 - < 30$
propan-2-ol	67-63-0	$\geq 5 - < 10$
graphite	7782-42-5	$\geq 1 - < 5$

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 : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician.
Wash off immediately with plenty of water for at least 15 minutes.
Remove contaminated clothing and shoes.
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.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
- 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.
Suspected of causing cancer.
Review section 2 of SDS to see all potential hazards.
Causes serious eye irritation.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

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SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO ₂) 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 ₂) Carbon monoxide Smoke Chlorine compounds
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	: Sweep up or vacuum up spillage and collect in suitable container for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: Do not breathe vapours or spray mist.
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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.
Always replace cap after use.
Dispose of rinse water in accordance with local and national regulations.

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
trichloroethylene	79-01-6	TWA	50 ppm 269 mg/m3	CA AB OEL
		STEL	100 ppm 537 mg/m3	CA AB OEL
		TWA	10 ppm	CA BC OEL
		STEL	25 ppm	CA BC OEL
		TWAEV	50 ppm 269 mg/m3	CA QC OEL
		STEV	200 ppm 1,070 mg/m3	CA QC OEL
		TWA	10 ppm	ACGIH
		STEL	25 ppm	ACGIH
propane	74-98-6	TWA	1,000 ppm	CA AB OEL
		TWA	1,000 ppm	CA BC OEL
		TWAEV	1,000 ppm 1,800 mg/m3	CA QC OEL
		TWA	1,000 ppm	CA ON OEL
butane	106-97-8	TWA	1,000 ppm	CA AB OEL
		TWA	600 ppm	CA BC OEL
		STEL	750 ppm	CA BC OEL
		TWAEV	800 ppm 1,900 mg/m3	CA QC OEL
		STEL	1,000 ppm	ACGIH
propan-2-ol	67-63-0	TWA	200 ppm 492 mg/m3	CA AB OEL

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		STEL	400 ppm 984 mg/m3	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	400 ppm	CA BC OEL
		TWAEV	400 ppm 983 mg/m3	CA QC OEL
		STEV	500 ppm 1,230 mg/m3	CA QC OEL
		TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
graphite	7782-42-5	TWA (Respirable)	2 mg/m3	CA BC OEL
		TWAEV (Respirable fibres)	5 mg/m3	CA QC OEL
		TWAEV (Total fibres)	10 mg/m3	CA QC OEL
		TWAEV (respirable dust)	2 mg/m3	CA QC OEL

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
TRICHLOROETHENE	79-01-6	Trichloroacetic acid	Urine	End of shift at end of workweek	15 mg/l	ACGIH BEI
		Trichloroethanol	In blood	End of shift at end of workweek	0.5 mg/l	ACGIH BEI
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	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 : Safety glasses
Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles

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with pure water.

- 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 liquefied gas
- Colour : dark grey
- Odour : solvent-like
- Odour Threshold : No data available
- pH : Not applicable
- Melting point/freezing point : not determined
- Boiling point : 82.2 - 87.8 °C
- Flash point :
Not applicable
- Evaporation rate : > 1
n-Butyl Acetate = 1.0
- Flammability (solid, gas, liquid) : Flammable aerosol.
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : No data available
- Density : 1.32 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 : > 20 kJ/g

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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. Extremes of temperature and direct sunlight.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Phosgene Hydrogen chloride gas Chlorine Carbon oxides

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). Causes skin irritation. Suspected of causing cancer. Review section 2 of SDS to see all potential hazards. Causes serious eye irritation. Treat symptomatically. Symptoms may be delayed.

Carcinogenicity:

IARC	Group 1: Carcinogenic to humans	
	trichloroethylene	79-01-6
ACGIH	Suspected human carcinogen	
	trichloroethylene	79-01-6

Acute toxicity

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Product:

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

Components:

trichloroethylene:

Acute oral toxicity : LD50 Oral Rat: 4,920 mg/kg

Acute inhalation toxicity : LC50 Mouse: 8450 ppm
Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal Rabbit: > 20,000 mg/kg

propan-2-ol:

Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg
Method: Calculation method

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Irritating to eyes.

Respiratory or skin sensitisation

No data available

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:

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Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., 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-octanol/water : Remarks: No data available

Components:

trichloroethylene :

Partition coefficient: n-octanol/water : log Pow: 2.29

butane :

Partition coefficient: n-octanol/water : Pow: 2.89

propan-2-ol :

Partition coefficient: n-octanol/water : log Pow: 0.05

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Additional ecological information : No data available

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.

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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): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity
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Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity
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Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity
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Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA): UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity
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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:

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)

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SECTION 16. OTHER INFORMATION

WHMIS - GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

: **Danger:**

: Flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer.

: **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. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.

: **Response:** IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. 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 occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse.

: **Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in a well-ventilated place.

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

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