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### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : ZEP NON-FLAMMABLE BRAKE CLEANER\_20N20\_12CT

Material number : 0000000001047961

## 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 : CHEMTREC: 800-424-9300 - All Calls Recorded.

**Emergency** 

Recommended use of the chemical and restrictions on use

### **SECTION 2. HAZARDS IDENTIFICATION**

### **Emergency Overview**

Appearance	Aerosol containing a compressed gas	
Colour	clear, colourless	
Odour	characteristic	

### **GHS Classification**

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

**GHS** label elements

Hazard pictograms :







Gas cylinder

Signal word : Danger

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Hazard statements : H280 Contains gas under pressure; may explode if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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.

P264 Wash skin thoroughly after handling.

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.

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 to an approved waste

disposal plant.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

### **Hazardous components**

Chemical name	CAS-No.	Concentration [%]
tetrachloroethylene	127-18-4	>= 80 - <= 100
carbon dioxide	124-38-9	>= 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. Get medical attention immediately.

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

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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 reuse.

In case of eye contact : Remove contact lenses.

In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If eye irritation persists, consult a specialist.

Protect unharmed eye.

Keep eye wide open while rinsing.

If swallowed : DO NOT induce vomiting unless directed to do so by a

physician or poison control center. Keep respiratory tract clear.

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 dependent on exposure (dose, concentration,

contact time).

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.

Causes skin irritation.

Causes serious eve irritation.

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 : Dry chemical

Alcohol-resistant foam Carbon dioxide (CO2)

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 (CO2)

Carbon monoxide

Smoke

Chlorine compounds

phosgene

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.

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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. Remove all sources of ignition.

Immediately 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.

Container may be opened only under exhaust ventilation

hood.

Always replace cap after use.

Dispose of rinse water in accordance with local and national

regulations.

Do not breathe vapours or spray mist.

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.

Keep in a dry, cool and well-ventilated place.

No smoking.

Materials to avoid : Strong oxidizing agents

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
tetrachloroethylene	127-18-4	STEL	STEL 100 ppm 678 mg/m3	
		TWA	25 ppm 170 mg/m3	CA AB OEL
		TWA	25 ppm	CA BC OEL
		STEL	100 ppm	CA BC OEL
		TWAEV	25 ppm 170 mg/m3	CA QC OEL
		STEV	100 ppm 685 mg/m3	CA QC OEL
		TWA	25 ppm	ACGIH
		STEL	100 ppm	ACGIH
carbon dioxide	124-38-9	TWA	5,000 ppm 9,000 mg/m3	CA AB OEL
		STEL	30,000 ppm 54,000 mg/m3	CA AB OEL
		TWA	5,000 ppm	CA BC OEL
		STEL	15,000 ppm	CA BC OEL
		STEV	30,000 ppm 54,000 mg/m3	CA QC OEL
		TWAEV	5,000 ppm 9,000 mg/m3	CA QC OEL
		TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH

## **Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Samplin g time	Permissible concentratio n	Basis
TETRACHLOROETHE NE	127-18-4	Tetrachloro ethylene	In blood	Prior to shift (16 hours after exposure ceases)	0.5 mg/l	ACGIH BEI
		Tetrachloro ethylene	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 : No personal respiratory protective equipment normally

required.

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Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Skin and body protection : No special protection is required.

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 : clear, colourless
Odour : characteristic
Odour Threshold : No data available
pH : Not applicable
Melting point/freezing point : No data available

Flash point :

does not flash

: No data available

Evaporation rate : not determined

Flammability (solid, gas,

liquid)

**Boiling point** 

The product is not flammable.

Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : 5,860 - 6,894 hPa
Relative vapour density : No data available
Density : 1.619 g/cm3

Solubility(ies)

Water solubility : insoluble

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 : 4.88 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 : Aluminium

Strong oxidizing agents

Hazardous decomposition

products

: Carbon monoxide Carbon dioxide (CO2)

Gaseous hydrogen chloride (HCI).

Phosgene Chlorine

### **SECTION 11. TOXICOLOGICAL INFORMATION**

**Potential Health Effects** 

Aggravated Medical

Condition

: None known.

Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration,

contact time).

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.

Causes skin irritation.

Causes serious eye irritation.

Review section 2 of SDS to see all potential hazards. 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

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### **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate : 2,696 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

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** 

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**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

Components:

tetrachloroethylene:

Partition coefficient: n-

octanol/water

: log Pow: 3.40

: Remarks: No data available

### Mobility in soil

No data available

### Other adverse effects

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. 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, NON-FLAMMABLE, 2.2, - Limited quantity

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Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, - Limited quantity

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)

### **SECTION 16. OTHER INFORMATION**

WHMIS - GHS Label Information:

Hazard pictograms







Signal word : Danger:

Hazard statements : Contains gas under pressure; may explode if heated. Causes skin irritation. Causes

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Precautionary statements

serious eye irritation. May cause cancer.

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash skin thoroughly after handling. 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 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 to an approved waste disposal plant.

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