SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP HEAVY-DUTY OVEN & GRILL CLEANER 20N19 12CT

Material number : CAOVGR19

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

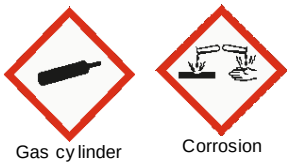
Appearance	Aerosol containing a liquefied gas
Colour	grey, white
Odour	characteristic

GHS Classification

Gases under pressure : Liquefied gas
Skin corrosion : Category 1
Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Gas cylinder Corrosion

Signal word : Danger

Hazard statements : H280 Contains gas under pressure; may explode if heated.
H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.
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.
P363 Wash contaminated clothing before reuse.
Storage:
P410 + P403 Protect from sunlight. Store in a well-ventilated place.
P412 Do not expose to temperatures exceeding 50 °C/ 122 °F.
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 [%]
2-(2-butoxyethoxy)ethanol	112-34-5	>= 10 - < 30
sodium hydroxide	1310-73-2	>= 1 - < 5
butane	106-97-8	>= 1 - < 5
2-aminoethanol	141-43-5	>= 1 - < 5
propane	74-98-6	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Get medical attention immediately.
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 : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with

		difficulty. Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated 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. Rinse immediately with plenty of water, also under the eyelids, 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. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center. 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 blistering, irritation, burns, and pain. Causes severe skin burns and eye damage. 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	:	Water spray jet Alcohol-resistant foam Carbon dioxide (CO2) 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 (CO2) Carbon monoxide Smoke Nitrogen oxides (NOx)
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.
Standard procedure for chemical fires.

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.
Do not breathe vapours or spray mist.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
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.
Keep in a dry, cool and well-ventilated place.
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
2-(2-butoxyethoxy)ethanol	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH
sodium hydroxide	1310-73-2	(c)	2 mg/m3	CA AB OEL
		C	2 mg/m3	CA BC OEL
		C	2 mg/m3	CA QC OEL
		C	2 mg/m3	ACGIH
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
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
		TWA	3 ppm	ACGIH
		STEL	6 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

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 : 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 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	:	Aerosol containing a liquefied gas
Colour	:	grey, white
Odour	:	characteristic
Odour Threshold	:	No data available
pH	:	13.0 - 14.0
Melting point/freezing point	:	No data available
Boiling point	:	100 °C
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas, liquid)	:	The product is not flammable.
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	not determined
Relative vapour density	:	No data available
Density	:	1.43 g/cm3
Solubility(ies)		
Water solubility	:	soluble
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	:	7.38 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	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	Acids This product contains sodium hydroxide or potassium hydroxide that may corrode some soft metals and may react with tin, zinc, aluminum to form hydrogen gas.
Hazardous decomposition products	:	Carbon oxides Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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 blistering, irritation, burns, and pain. Causes severe skin burns and eye damage. 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.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Acute toxicity

Product:

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

Acute inhalation toxicity : Acute toxicity estimate : > 10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

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

Components:

sodium hydroxide:
Acute dermal toxicity : Acute toxicity estimate Rabbit: 1,350 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

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

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:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:
sodium hydroxide :

Toxicity to fish	:	LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l Exposure time: 96 h Test Method: static test LC50 (Oncorhynchus tshawytscha (chinook salmon)): 152 mg/l Exposure time: 96 h LC50 (Oncorhynchus mykiss (rainbow trout)): 40 mg/l Exposure time: 48 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 34 - 47 mg/l Exposure time: 48 h EC50 (Crangon crangon (shrimp)): 33 - 100 mg/l Exposure time: 48 h

Persistence and degradability

No data available

Bioaccumulative potential

Product:

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

Components:

2-(2-butoxyethoxy)ethanol :

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

butane :

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

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 : No data available

Components:
sodium hydroxide :

Additional ecological information : Harmful to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.
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, CORROSIVE, 2.2, (8), - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel):
UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, (8), - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air):
UN1950, Aerosols, non-flammable, containing substances in Class 8, Packing Group III, 2.2, (8), - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air):
UN1950, Aerosols, non-flammable, containing substances in Class 8, Packing Group III, 2.2, (8), - Limited quantity

Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA):
UN1950, Aerosols, non-flammable, corrosive, 2.2, (8), - 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	This product contains the following components 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

WHMIS - GHS Label Information:

Hazard pictograms :

Gas cylinder Corrosion

Signal word : **Danger:**

Hazard statements : Contains gas under pressure; may explode if heated. Causes severe skin burns and eye damage.

Precautionary statements :

Prevention: Do not breathe dust or mist. Wash skin thoroughly after handling. 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. Wash contaminated clothing before reuse.
Storage: Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50 °C/ 122 °F.
Disposal: Dispose of contents/container in accordance with local regulation.

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Revision Date:	10/01/2023
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