ZEP BRAKE FLUSH (VOC) 5GL

Version 5.0 Revision Date 12/15/2023 Print Date 04/28/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name ZEP BRAKE FLUSH (VOC)_5GL

Material number : L93535

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 CHEMTREC: 800-424-9300 - All Calls Recorded. **Emergency** In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	colourless
Odour	hydrocarbon-like

GHS Classification

Flammable liquids Category 2 Eye irritation Category 2A

Specific target organ toxicity -

single exposure

: Category 3 (Central nervous system)

GHS label elements

Hazard pictograms



Exclamation

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

: Prevention: Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking.

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P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician 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.

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

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P235 Keep cool.

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 [%]
acetone	67-64-1	>= 90 - < 100
Naphtha (petroleum), hydrotreated light	64742-49-0	>= 5 - < 10
propan-2-ol	67-63-0	>= 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. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.

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If unconscious, place in recovery position and seek medical

advice.

In case of skin contact If skin irritation persists, call a physician.

Wash off with soap and water.

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 : If in eyes, rinse with water for 15 minutes.

> 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.

Do NOT induce vomiting.

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).

Symptoms may include central nervous system depression,

resulting in headache, nausea and/or dizziness.

Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash.

May cause drowsiness or dizziness. Causes serious eye irritation.

Review section 2 of SDS to see all potential hazards.

: Treat symptomatically. Symptoms may be delayed. Notes to physician

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : 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

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

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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

: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13). Keep in suitable, closed containers 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.

Take precautionary measures against static discharges.

Provide sufficient air exchange and/or exhaust in work rooms.

Open drum carefully as content may be under pressure.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage

: No smoking.

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.

Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline

materials.

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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
acetone	67-64-1	TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	250 ppm 590 mg/m3	NIOSH REL
		TWA	1,000 ppm 2,400 mg/m3	OSHA Z-1
		TWA	750 ppm 1,800 mg/m3	OSHA P0
		STEL	1,000 ppm 2,400 mg/m3	OSHA P0
		STEL	750 ppm 1,780 mg/m3	CAL PEL
		С	3,000 ppm	CAL PEL
		PEL	500 ppm 1,200 mg/m3	CAL PEL
propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0
		STEL	500 ppm 1,225 mg/m3	OSHA P0
		PEL	400 ppm 980 mg/m3	CAL PEL
		STEL	500 ppm 1,225 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-PROPANONE	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	25 mg/l	ACGIH BEI
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workwee	40 mg/l	ACGIH BEI

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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 : Eye wash bottle 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 : liquid

Colour : colourless

Odour : hydrocarbon-like
Odour Threshold : No data available
pH : Not applicable
Melting point/freezing point : No data available

Boiling point : $55.5 \, ^{\circ}\text{C}$ Flash point : $< -18 \, ^{\circ}\text{C}$

Evaporation rate : No data available
Upper explosion limit : No data available
Lower explosion limit : No data available
Vapour pressure : No data available
Relative vapour density : No data available

Density : 0.77 g/cm3

Solubility(ies)

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Water solubility : partly 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

SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Extremes of temperature and direct sunlight.

Incompatible materials : Oxidizing agents

> Strong acids Alkaline materials

Hazardous decomposition

products

: 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).

Symptoms may include central nervous system depression,

resulting in headache, nausea and/or dizziness.

Effects are immediate and delayed.

Symptoms may include irritation, redness, pain, and rash.

May cause drowsiness or dizziness.

Causes serious eye irritation.

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

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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.

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 No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Acute toxicity

Product:

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

Method: Calculation method

Components:

acetone:

Acute oral toxicity : LD50 Rat: 5,800 mg/kg

Acute inhalation toxicity : LC50 Rat: 132 mg/l

Exposure time: 3 h

LC50 Rat: 50.1 mg/l

Acute dermal toxicity : LD50 Guinea pig: > 7,426 mg/kg

LD50 Rabbit: > 7,426 mg/kg

propan-2-ol:

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

Method: Calculation method

Skin corrosion/irritation

Product:

Remarks: May irritate skin.

Serious eye damage/eye irritation

Product:

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

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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 Components: propan-2-ol:

Partition coefficient: n-

octanol/water

: Remarks: No data available

octarioi/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

: log Pow: 0.05

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).

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Additional ecological information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to

aquatic life.

The GHS H401 statement "Toxic to aquatic life" noted

above is an Acute Aquatic Toxicity Category 2

classification. Although the product has the potential to harm the environment, it is not classified as a marine pollutant or regulated under transportation regulations.

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):

UN1993, Flammable liquids, n.o.s., (ACETONE, HEPTANE), 3, II

Transportation Regulation: IMDG (Vessel):

UN1993, FLAMMABLE LIQUID, N.O.S., (ACETONE, HEPTANE), 3, II

Transportation Regulation: IATA (Cargo Air):

UN1993, Flammable liquid, n.o.s., (ACETONE, HEPTANE), 3, II

Transportation Regulation: IATA (Passenger Air):

UN1993, Flammable liquid, n.o.s., (ACETONE, HEPTANE), 3, II

Transportation Regulation: TDG (Canada):

UN1993, FLAMMABLE LIQUID, N.O.S., (ACETONE, HEPTANE), 3, II

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

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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)
acetone	67-64-1	5000	*

^{*:} 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)

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65



WARNING: This product can expose you to chemicals including benzene, which is/are known to the State of California to cause cancer and 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)

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SECTION 16. OTHER INFORMATION

Further information

NFPA:

HEALTH	2
FLAMMABILITY	3
INSTABILITY	0
SPECIAL HAZARD.	

^{0 =} not significant, 1 =Slight,

HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic

OSHA - GHS Label Information:

Hazard pictograms



Exclamation

Signal word

Hazard statements

Highly flammable liquid and vapour. Causes serious eye irritation. May cause

drowsiness or dizziness.

Precautionary statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. 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/ eye protection/ face protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

^{2 =} Moderate, 3 = High

^{4 =} Extreme

SAFETY DATA SHEET ZEP BRAKE FLUSH (VOC)_5GL

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skin with water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician 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 eye irritation persists: Get medical advice/ attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Keep cool. **Disposal:** Dispose of contents/container in accordance with local regulation.

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