

SAFETY DATA SHEET

Issuing date 29-Oct-2024

Revision Date 29-Oct-2024

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name BRAKE-KLEEN

Other means of identification

Product code 8195, 9454, 9929, 8418

Product Type Non-flammable aerosol
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Brake Parts Cleaner.

Uses advised against No information available

Manufactured For:
Tifco Industries
21400 Northwest Freeway
Cypress, TX 77429
800-868-4326

Emergency telephone number

**Chemical Emergency
Phone Number** CHEM-TEL, INC. 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

| | |
|--|----------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Skin Sensitization | Category 1 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Gases under pressure | Compressed gas |

GHS Label elements, including precautionary statements

Emergency Overview

Danger

Hazard Statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing cancer
May cause respiratory irritation. May cause drowsiness or dizziness
Contains gas under pressure; may explode if heated



Appearance Clear **Physical state** Aerosol **Odor** Solvent

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves, protective clothing, eye protection, face protection.
Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing fumes, gas, mist, vapors, spray.
Contaminated work clothing must not be allowed out of the workplace
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

If exposed or concerned: Call a poison center, doctor.
Specific treatment (see first aid on this label).
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.
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice, attention
Take off contaminated clothing and wash it before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor, physician if you feel unwell.

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed
Protect from sunlight

Precautionary Statements - Disposal

Dispose of contents, container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Not applicable

Other information

0% of mixture consists of ingredients(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|---------------------|----------|----------|
| TETRACHLOROETHYLENE | 127-18-4 | 90-100 |
| CARBON DIOXIDE | 124-38-9 | 1-10 |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**Description of first aid measures**

| | |
|-----------------------|--|
| General advice | Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas. |
| Eye contact | Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. Seek immediate medical attention, advice. If eye irritation persists, consult a doctor. |
| Skin contact | Rinse immediately with plenty of water for 15 minutes and seek medical advice if skin irritation persists. |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately. |
| Ingestion | Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to unconscious person. Risk of product entering the lungs on vomiting after ingestion. |

Most important symptoms and effects, both acute and delayed

| | |
|----------------------|---|
| Main Symptoms | May cause an allergic skin reaction. Causes skin and eye irritation. May cause respiratory irritation. May cause dizziness or drowsiness. Harmful and may be fatal if swallowed and enters airways. |
|----------------------|---|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog.Dry chemical. Foam.Carbon dioxide (CO2). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventilation to keep the exposure levels below the OELS.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Report spills as required by local and federal regulations.

Methods and material for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods for cleaning up Soak up with inert absorbent material. Contain liquid and collect with an inter, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid skin contact. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep containers tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, oxidizing agents.

Aerosol Level 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH |
|---------------------------------|----------------------------------|--|---|
| TETRACHLOROETHYLENE 127-18-4 | STEL: 100 ppm TWA: 25 ppm | TWA: 100 ppm (vacated) TWA: 25 ppm (vacated) TWA: 170 mg/m ³ Ceiling: 200 ppm | IDLH: 150 ppm |
| CARBON DIOXIDE 124-38-9 | STEL: 30000 ppm TWA: 5000 ppm | TWA: 5000 ppm TWA: 9000 mg/m ³ (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m ³ (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m ³ | IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³ |

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Measures

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tightly fitting safety goggles. Safety glasses with side-shields.

Skin and body protection

Chemical resistant apron. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Aerosol

Appearance

Clear

Color

Colorless

Odor

Solvent

Odor Threshold

Property

Values

Remarks • Method

pH

No information available

Melting/freezing point

No information available

Boiling point/boiling range

Flash Point

No information available

Not flammable Additionally, propellant has no flashpoint.

Evaporation rate

No information available

Flammability (solid, gas)

No information available

Flammability Limits in Air

upper flammability limit

| | | |
|--|--------------------------|----------------|
| lower flammability limit | No information available | |
| Vapor pressure | No information available | |
| Vapor density | No information available | |
| Specific gravity | 1.621 | +/- 0.005 |
| Water solubility | Practically insoluble | |
| Partition coefficient: n-octanol/water | | |
| Autoignition temperature | No information available | Not applicable |
| Hyphen | | |
| Viscosity | No information available | |
| Explosive properties | | |

Other information

VOC Content(%) 0

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Strong acids, alkalis, oxidizing agents.

Hazardous decomposition products

Carbon oxides , Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

| | |
|--------------|---|
| Inhalation | Avoid inhaling vapors or mists. Harmful if inhaled. May cause irritation to respiratory system. |
| Eye contact | Irritating to eyes. |
| Skin contact | Causes skin irritation. |
| Ingestion | Harmful and may be fatal if swallowed and enters airways and lungs. |

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------------|----------------------|-------------|-------------------------|
| TETRACHLOROETHYLENE 127-18-4 | = 2629 mg/kg (Rat) | - | = 27.8 mg/L (Rat) 4 h |

Information on toxicological effects

Symptoms Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|---------------------------|---|
| Skin corrosion/irritation | Causes skin irritation. |
| Eye damage/irritation | Causes eye irritation. |
| Irritation | Causes skin and eye irritation. May cause respiratory irritation. |
| Sensitization | May cause an allergic reaction if in direct contact with skin. |
| Germ cell mutagenicity | Not a germ cell mutagen. |

Carcinogenicity

The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---------------------------------|-------|----------|------------------------|------|
| TETRACHLOROETHYLENE 127-18-4 | A3 | Group 2A | Reasonably Anticipated | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity

This product does not contain any known or suspected reproductive hazards.

Specific target organ systemic toxicity (single exposure)

May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ systemic toxicity (repeated exposure)

None known.

Chronic toxicity

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.

Target Organ Effects

Eyes, Skin, Central nervous system, Respiratory system, Kidney, Liver.

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg ppm mg/l

ATEmix (inhalation-vapor) 271.8 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---------------------------------|---|---|----------------------------|---|
| TETRACHLOROETHYLENE 127-18-4 | EC50: >500mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 12.4 - 14.4mg/L (96h, Pimephales promelas) LC50: 8.6 - 13.5mg/L (96h, Pimephales promelas) LC50: 11.0 - 15.0mg/L (96h, Lepomis macrochirus) LC50: 4.73 - 5.27mg/L (96h, Oncorhynchus mykiss) | - | EC50: 6.1 - 9.0mg/L (48h, Daphnia magna) |
| CARBON DIOXIDE 124-38-9 | - | 0.46 mg/L LC50 Oncorhynchus mykiss | - | - |

Persistence and degradability**Bioaccumulation**

| Chemical Name | Partition coefficient |
|---------------------------------|-----------------------|
| TETRACHLOROETHYLENE 127-18-4 | 2.53 |

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging Do not re-use empty containers. Pressurized container: Do not pierce or burn, even after use.

14. TRANSPORT INFORMATION

DOT Ground LIMITED QUANTITY

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

IMDG UN1950, AEROSOLS, 2.2 (6.1),LTD.QTY.

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL/NDSL | EINECS/ELI NCS | ENCS | IECSC | KECL | PICCS | AICS |
|---------------------|------|----------|-------------------|------|-------|------|-------|------|
| TETRACHLOROETHYLENE | X | X | X | X | X | X | X | X |
| CARBON DIOXIDE | X | X | X | X | X | X | X | X |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | CAS No. | Weight-% | SARA 313 - Threshold |
|---------------|---------|----------|----------------------|
|---------------|---------|----------|----------------------|

| | | | Values % |
|--------------------------------|----------|--------|----------|
| TETRACHLOROETHYLENE - 127-18-4 | 127-18-4 | 90-100 | 0.1 |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | Yes |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| TETRACHLOROETHYLENE 127-18-4 | | X | X | |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | Reportable Quantity (RQ) |
|---------------------------------|--------------------------|------------------------------------|---|
| TETRACHLOROETHYLENE 127-18-4 | 100 lb | | RQ 100 lb final RQ RQ 45.4 kg final RQ |

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

| Chemical Name | California Proposition 65 |
|--------------------------------|---------------------------|
| TETRACHLOROETHYLENE - 127-18-4 | Cancer/ 90-100 |

Note

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------|------------|---------------|--------------|
| TETRACHLOROETHYLENE 127-18-4 | X | X | X |
| CARBON DIOXIDE 124-38-9 | X | X | X |

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION

| | | | | | | | | |
|-------------|----------------|---|--------------|---|------------------|---|---------------------|---|
| <u>NFPA</u> | Health hazards | 2 | Flammability | 0 | Instability | 0 | Special hazards | - |
| <u>HMIS</u> | Health hazards | 2 | Flammability | 0 | Physical hazards | 1 | Personal protection | B |

| | |
|---------------|-------------|
| Issuing date | 29-Oct-2024 |
| Revision Date | 29-Oct-2024 |
| Revision Note | |

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet