

Safety Data Sheet

SECTION I - IDENTIFICATION

PRODUCT NAME: Brake-Kleen
PRODUCT CODE: 8195, 9454, 9929, 8418
PRODUCT USE: Degreaser
COMPANY NAME: Tifco Industries
COMPANY ADDRESS: PO Box 40277, Houston, TX 77240
COMPANY PHONE: 281-571-6000
EMERGENCY PHONE: 800-255-3924

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION: Dissolved Gas

Skin Irritant: Category 2

Eye Irritant: Category 2b

Carcinogenicity: Category 2

HAZARD STATEMENT(S): Contains gas under pressure; May explode if heated. Causes skin and eye irritation. Suspected of causing cancer.

This product contains the following percentage of chemicals of unknown toxicity: 0%

PRECAUTIONARY STATEMENTS: Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50C/120F. Store in a well-ventilated place. Wash hands thoroughly after handling. Wear protective gloves. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. 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 attention. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, eye protection, and vapor respirator. If exposed or concerned: Get medical advice or attention. Store locked up. Dispose of contents and container in accordance with local, state, and national regulations.



SYMBOL:

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Tetrachloroethylene	127-18-4	60-100%
Carbon Dioxide	124-38-9	1-5%

SECTION IV - FIRST AID MEASURES

EYES: 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 or attention.

INGESTION: Rinse mouth out with water. Seek medical attention.

INHALATION: Move to fresh air. If not breathing administer artificial respiration, if breathing is difficult give oxygen.

SKIN: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

ACUTE HEALTH HAZARDS: Acute, Inhalation of vapors may be narcotic or anesthetic. Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea. Liquid or vapors may be irritating to skin and eyes.

CHRONIC HEALTH HAZARDS: Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.

NOTE TO PHYSICIAN: Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

SECTION V – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, foam, or Carbon Dioxide (CO₂).

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UNSUITABLE EXTINGUISHING MEDIA: Water spray/stream.

SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires. Use water spray only to cool exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, chlorine, hydrogen chloride and phosgene.

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Refer to section VIII for proper Personal Protective Equipment.

SPILL: Use absorbent on spill, sweep to clean. Dispose in accordance with local, state and federal laws. Small releases may be wiped up with wiping material.

WASTE DISPOSAL: Dispose of in accordance with local, state and federal regulations.

RCRA STATUS: Waste likely considered hazardous under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION VII – HANDLING AND STORAGE

HANDLING AND STORAGE: Protect from sunlight. Store in a well ventilated place. Do not expose to temperatures exceeding 50°C/122°F. Pressurized container: Do not pierce or burn, even after use.

OTHER PRECAUTIONS: Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warning and precautions listed for the product. Keep out of the reach of children

INCOMPATIBILITY: Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Tetrachloroethylene	100 ppm	25 ppm
Carbon Dioxide	5000 ppm	5000 ppm

ENGINEERING CONTROLS / VENTILATION: Use only outdoors or in a well-ventilated area.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved organic vapor respiratory protection if listed exposure limits (section VIII) are exceeded.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses and chemical resistant gloves

ADDITIONAL MEASURES: Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear Aerosol Spray

ODOR: Chlorinated solvent odor

ODOR THRESHOLD: 1ppm

BOILING POINT: 250°F (121°C)

FREEZING POINT: N/D

FLAMMABILITY: Not considered a flammable aerosol or an extremely flammable aerosol by OSHA (29CFR 1910.1200)

FLASH POINT: N/D

AUTOIGNITION TEMPERATURE: N/D

LOWER FLAMMABILITY LIMIT: N/D

UPPER FLAMMABILITY LIMIT: N/D

VAPOR PRESSURE (mm Hg): 18 @ 77°F (25°C)

VAPOR DENSITY (AIR=1): > 1 @ 77°F (25°C)

EVAPORATION RATE: > 3 (Fast) 0.3 Slow

SPECIFIC GRAVITY (H2O=1): 1.5 @ 77°F (25°C)

pH: N/A

SOLIDS (%): N/D

SOLUBILITY IN WATER: 0%

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PARTITION COEFFICIENT: n-OCTANOL/WATER (K_{ow}): N/D
VOLATILITY INCLUDING WATER (%): 100%
VOLATILE ORGANIC COMPOUNDS (VOC): 0%
DIELECTRIC STRENGTH (Volts): N/D
DECOMPOSITION TEMPERATURE: N/D
VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY DATA

REACTIVITY: None Known
CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: Temperatures greater than 122°F and sources of ignition.
INCOMPATIBILITY: Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.
HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Oxides of carbon, chlorine, hydrogen chloride and phosgene.
POSSIBLE HAZARDOUS REACTIONS: None Known

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Tetrachloroethylene (127-18-4) LD₅₀ (Oral, Rat) 2629 mg/kg; LD₅₀ (Dermal, Rabbit) > 3228 mg/kg; LD₅₀ (IPR, Mouse) 4700 mg/kg; LC₅₀ (Inhalation, Mouse, 4hr) 5200 ppm; LC₅₀ (Inhalation, Rat, 8hr) 34200 mg/m³
ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin
EYES: Causes severe irritation, redness, tearing, pain, visual disturbance, may cause eye damage.
INGESTION: Nausea, vomiting, headaches, abdominal pain, diarrhea, dizziness, pulmonary edema, unconsciousness or death, estimated fatal dose is 3-5ml/kg
INHALATION: Irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system, prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects, and death.
SKIN: Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.
MEDICAL CONDITION AGGRAVATED: Excessive exposure will aggravate pre-existing disorders of eyes, skin, respiratory, liver, kidney, cardiovascular system, pulmonary illnesses, or central nervous system.
ACUTE HEALTH HAZARDS: Acute, Inhalation of vapors may be narcotic or anesthetic. Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea. Liquid or vapors may be irritating to skin and eyes.
CHRONIC HEALTH HAZARDS: Possible cancer causing agent and overexposure may also include damage to kidneys, liver, dizziness, headache, nausea, mental confusion, visual disturbances, dermatitis, lungs, blood, or central nervous system.
CARCINOGENICITY: OSHA: Yes ACGIH: A2 - Suspected NTP: 2 - Anticipated
IARC: 2A - Probable **OTHER:** CA Prop 65

SECTION XII – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Tetrachloroethylene (127-18-4) LC₅₀ (Fathead Minnow, 96hr) 18.4 mg/L; (Daphnia, 48hr) 18 mg/L; (Rainbow Trout, 96hr) 5 mg/L; (Bluegill Sunfish, 96hr) 13 mg/L
BIODEGRADABILITY: Component or components of this product are not biodegradable.
BIOACCUMULATION: This product is not expected to bioaccumulate.
SOIL MOBILITY: This product is mobile in soil.
OTHER ECOLOGICAL HAZARDS: This material is toxic to aquatic life.

SECTION XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with local, state and federal regulations.
RCRA STATUS: Waste likely considered hazardous under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Aerosols, Ltd. Qty.
HAZARD CLASS/DIVISION: 2.2

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UN/NA NUMBER: UN 1950
PACKAGING GROUP: N/A

AIR SHIPMENT

PROPER SHIPPING NAME: Aerosols, Ltd. Qty.
HAZARD CLASS/DIVISION: 2.2
UN/NA NUMBER: UN 1950

SHIPPING BY WATER:

VESSEL (IMO/IMDG)
PROPER SHIPPING NAME: Aerosols, Ltd. Qty.
HAZARD CLASS/DIVISION: 2.2
UN/NA NUMBER: UN 1950
ENVIRONMENTAL HAZARDS WATER: Marine Pollutant

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All Chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Tetrachloroethylene (127-18-4)
Reportable Quantity = 100 lbs

SARA 311/312 HAZARD CATEGORIES: Acute Health, Chronic Health.

SARA 313 REPORTABLE INGREDIENTS: Tetrachloroethylene (127-18-4)

STATE REGULATIONS: Tetrachloroethylene (127-18-4) is known to the state of California to cause cancer, birth defects or other reproductive harm. Right-to-Know acts for New York, Rhode Island, Pennsylvania, Florida, Minnesota, Massachusetts, Michigan, New Jersey, Tennessee; Spill Reporting for Massachusetts, New Jersey, Louisiana; Connecticut hazardous material survey; Illinois toxic substances disclosure to employee act, Illinois chemical safety act

INTERNATIONAL REGULATIONS: Tetrachloroethylene (127-18-4) WHMIS (Canada) Class D-1B: Material causing immediate and serious toxic effects (TOXIC). Class D-2A: Material causing other toxic effects (VERY TOXIC).

NFPA HEALTH: 2
NFPA FLAMMABILITY: 0
NFPA REACTIVITY: 0
NFPA OTHER: None

HMIS HEALTH: 2
HMIS FLAMMABILITY: 0
HMIS REACTIVITY: 0
HMIS PROTECTION: B

SECTION XVI - ADDITIONAL INFORMATION

PREPARATION BY: Jonathon Jarvis
DATE PREPARED: 07/29/2013
REVISION DATE: 04/09/2015

N/A = Not Applicable; N/D = Not Determined

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