

**Safety Data Sheet**  
**Non-Chlorinated Brake-Kleen**

**SECTION I - IDENTIFICATION**

**PRODUCT IDENTIFIER:** Non-Chlorinated Brake-Kleen  
**PRODUCT CODE:** 9772  
**RECOMMENDED USE:** Brake Cleaner  
**RESTRICTIONS ON USE:** None known.  
**COMPANY NAME:** Tifco Industries  
**COMPANY ADDRESS:** P.O. Box 40277, Houston, TX 77240  
**COMPANY PHONE:** 281-571-6000  
**EMERGENCY PHONE:** 800-255-3924

**SECTION II – HAZARDS IDENTIFICATION**

**CLASSIFICATION:** Flammable Liquid: Category 2

Skin Irritant: Category 2

Reproductive Toxicity: Category 2

Specific Target Organ Toxicity (Single Exposure): Category 3

Specific Target Organ Toxicity (Repeated Exposure): Category 2

Aspiration Hazard: Category 1

**HAZARD STATEMENT(S): DANGER:** Highly flammable liquid and vapor. Causes skin irritation. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

This product contains the following percentage of chemicals of unknown toxicity: N/A

**PRECAUTIONARY STATEMENTS:** Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves, protective clothing and eye protection. If on skin (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water or shower. In case of fire, use dry chemical, carbon dioxide, foam or water spray or fog. Store in a well-ventilated place. Keep cool. Wash hands thoroughly after handling. If skin irritation occurs: Get medical advice or attention. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: Get medical advice or attention. Store locked up. Do not breathe mist, vapors and spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting. Dispose of contents and container in accordance with local, state and federal regulations.

**SYMBOL:**



**HAZARDS NOT OTHERWISE CLASSIFIED:** N/A

**SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Heptane	142-82-5	40-50%
Naphtha (petroleum), hydrotreated light	64742-49-0	10-20%
Distillates (petroleum), light distillate hydrotreating process, low-boiling	68410-97-9	10-20%
Hexane	110-54-3	10-20%
Isopropyl alcohol	67-63-0	1-5%

**SECTION IV - FIRST AID MEASURES**

**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.

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**INGESTION:** Rinse mouth out with water. Do not induce vomiting unless directed by medical authority. Keep head below hips if vomiting occurs. Seek immediate medical attention. Aspiration hazard. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing administer artificial respiration. If breathing is difficult give oxygen. Consult a physician.

**SKIN:** Remove contaminated clothes. Wash skin thoroughly with soap and water for 15 minutes. Seek medical attention if irritation develops. Wash contaminated clothing before reuse.

**ACUTE HEALTH HAZARDS:** Contact with eyes may cause irritation, redness, tearing. Causes skin irritation including redness, burning and drying/cracking. Prolonged and repeated inhalation of vapors may cause nausea, dizziness and drowsiness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration may cause pulmonary edema and pneumonitis.

**CHRONIC HEALTH HAZARDS:** Chronic inhalation can damage the central nervous system (CNS).

**NOTE TO PHYSICIAN:** Treatment of overexposure should be directed at the control of symptoms and the clinical condition. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

### SECTION V – FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Dry chemical, carbon dioxide, foam, and water spray or fog.

**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. Shut off all sources of ignition. Use water spray to disperse vapor and cool fire exposed containers. Prevent run off from entering streams, sewers, or drinking water supply.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** HIGHLY FLAMMABLE. Keep away from heat, sparks, open flames and other sources of ignition. Vapors may travel considerable distance to a source of ignition and flash back.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, various hydrocarbons.

### SECTION VI – ACCIDENTAL RELEASE MEASURES

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

**SPILL:** Eliminate all sources of ignition. Avoid contact with spilled material. Use non-sparking tools and explosion-proof equipment. Prevent spill from entering sewers, storm drains and natural waterways. Absorb with non-combustible material like vermiculite, sand or earth. Place waste in proper containers for waste disposal. U.S. regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll-free number for the U.S. Coast Guard National Response Center is 800-424-8802.

**WASTE DISPOSAL:** Dispose of contents in accordance with federal, state and local regulations. Do not dump in sewers.

**RCRA STATUS:** Waste likely considered D001 (Ignitable waste), under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

### SECTION VII – HANDLING AND STORAGE

**HANDLING AND STORAGE:** Do not use or store near heat, open flames, or other sources of ignition. Wear proper personal protective equipment when using this product. Avoid contact with skin, eyes and clothing. Do not inhale mist or vapor. Protect from sunlight. Do not use or store with strong oxidizers. Store in a cool, dry area. Keep away from heat, open flames, or other sources of ignition. Wash hands after use.

**OTHER PRECAUTIONS:** Keep out of the reach of children. Read and follow the directions on the product label. They are the best guide to using the product in the most effective manner. The label also gives you the necessary safety precautions to protect your health.

**INCOMPATIBILITY:** Strong oxidizing agents, strong reducing agents.

### SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Heptane	500 ppm	400 ppm
Naphtha (petroleum), hydrotreated light	Not Established	247 ppm
Distillates (petroleum), light distillate hydrotreating process, low-boiling	Not Established	200 ppm
Hexane	500 ppm	50 ppm
Isopropyl alcohol	400 ppm	200 ppm

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**ENGINEERING CONTROLS / VENTILATION:** Material is heavier than air. Material may concentrate in low lying areas. Normal, forced ventilation required to meet TLV requirements. Local exhaust ventilation is generally preferred.

**RESPIRATORY PROTECTION:** Not required with adequate ventilation. Wear NIOSH/MSHA approved respiratory protection if exposure limits are exceeded.

**PERSONAL PROTECTIVE EQUIPMENT:** Safety glasses/goggles and chemical resistant gloves.

**ADDITIONAL MEASURES:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin or eyes and avoid breathing vapors. Wash hands after use.

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Clear, colorless liquid

**ODOR:** Hydrocarbon odor

**ODOR THRESHOLD:** N/D

**pH:** N/D

**MELTING POINT/FREEZING POINT:** N/D

**INITIAL BOILING POINT AND BOILING RANGE:** N/D

**FLASH POINT:** N/D

**EVAPORATION RATE:** N/D

**FLAMMABILITY(solid/gas):** Highly Flammable Liquid

**UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:**

**LOWER FLAMMABILITY LIMIT:** N/D

**UPPER FLAMMABILITY LIMIT:** N/D

**EXPLOSIVE LIMIT LOWER (%):** N/D

**EXPLOSIVE LIMIT UPPER (%):** N/D

**VAPOR PRESSURE (mm Hg):** N/D

**VAPOR DENSITY (AIR=1):** N/D

**RELATIVE DENSITY (H<sub>2</sub>O=1):** 0.70 - 0.74 @ 77 °F (25 °C)

**SOLUBILITY(IES):** N/D

**PARTITION COEFFICIENT: n-OCTANOL/WATER (K<sub>ow</sub>):** N/D

**AUTOIGNITION TEMPERATURE:** N/D

**DECOMPOSITION TEMPERATURE:** N/D

**VISCOSITY:** N/D

## SECTION X – STABILITY AND REACTIVITY

**REACTIVITY:** None known.

**CHEMICAL STABILITY:** Stable.

**POSSIBLE HAZARDOUS REACTIONS:** None known.

**CONDITIONS TO AVOID:** Excess heat, open flame, sparks, electric equipment, ignition sources, and incompatible materials.

**INCOMPATIBLE MATERIALS:** Strong oxidizing agents, strong reducing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known.

## SECTION XI – TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION:** **n-Heptane** (142-82-5): LD<sub>50</sub> (Oral, Rat) > 15000 mg/kg; LD<sub>50</sub> (Dermal, Rabbit) > 3160 mg/kg; LC<sub>50</sub> (Inhalation, Rat, 4h) 103 mg/L. **Hexane** (110-54-3): LD<sub>50</sub> (Oral, Rat) > 5000 mg/kg; LD<sub>50</sub> (Dermal, Rabbit) > 2000 mg/kg; LC<sub>50</sub> (Inhalation, Rat, 4h) > 3367 ppm. **Isopropyl alcohol** (67-63-0): LD<sub>50</sub> (Oral, Rat) 5045 mg/kg; LD<sub>50</sub> (Dermal, Rabbit) 12870 mg/kg; LC<sub>50</sub> (Inhalation, Rat, 4h) 78.6 mg/L.

**ROUTES OF ENTRY:** Eyes, Ingestion, Inhalation, Skin

**EYES:** Causes irritation, redness, tearing, pain, blurred vision.

**INGESTION:** May cause gastrointestinal irritation, nausea, diarrhea, vomiting. Aspiration hazard. Can enter the lungs during swallowing or vomiting and cause chemical pneumonia or edema.

**INHALATION:** May cause respiratory tract irritation, dizziness, headaches, nausea, unconsciousness, central nervous system (CNS) depression.

**SKIN:** Causes localized defatting, irritation, dermatitis.

**MEDICAL CONDITION AGGRAVATED:** Pre-existing conditions of the central nervous system (CNS). Pre-existing disorders of the skin and respiratory system will be aggravated by over exposure.

**ACUTE HEALTH HAZARDS:** Contact with eyes may cause irritation, redness, tearing. Causes skin irritation including redness, burning and drying/cracking. Prolonged and repeated inhalation of vapors may cause nausea, dizziness and drowsiness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration may cause pulmonary edema and pneumonitis.

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**CHRONIC HEALTH HAZARDS:** Chronic inhalation can damage the central nervous system (CNS).  
**CARCINOGENICITY:** OSHA: No ACGIH: No NTP: No IARC: No OTHER: CA Prop 65

**SECTION XII – ECOLOGICAL INFORMATION**

**ECOTOXICITY:** Toxic to aquatic life with long lasting effects. Avoid release to the environment. **n-Heptane** (142-82-5): EC<sub>50</sub> (*Daphnia magna*, 48h) 1.50 mg/L. **Isopropyl alcohol** (67-63-0): LC<sub>50</sub> (Fish, 96h): > 100 mg/L; LC<sub>50</sub> (*Pimephales promelas*, 96h) 9640 mg/L; EC<sub>50</sub> (*Daphnia*, 24h) 5102 mg/L.

**PERSISTENCE AND DEGRADABILITY:** This product is biodegradable.

**BIOACCUMULATIVE POTENTIAL:** Components in this mixture can bioaccumulate in aquatic organisms.

**MOBILITY IN SOIL:** N/D

**OTHER ADVERSE EFFECTS:** None known.

**SECTION XIII – DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL:** Dispose of contents in accordance with federal, state and local regulations. Do not dump in sewers.

**RCRA STATUS:** Waste likely considered D001 (Ignitable waste), under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

**SECTION XIV - TRANSPORT INFORMATION**

**PROPER SHIPPING NAME:** Flammable liquid, n.o.s. (Heptanes, Hexanes)

**HAZARD CLASS/DIVISION:** 3

**UN/NA NUMBER:** UN 1993

**PACKING GROUP:** II

**AIR SHIPMENT**

**PROPER SHIPPING NAME:** Flammable liquid, n.o.s. (Heptanes, Hexanes)

**HAZARD CLASS/DIVISION:** 3

**UN/NA NUMBER:** UN 1993

**PACKING GROUP:** II

**SHIPPING BY WATER:**

**VESSEL (IMO/IMDG)**

**PROPER SHIPPING NAME:** Flammable liquid, n.o.s. (Heptanes, Hexanes)

**HAZARD CLASS/DIVISION:** 3

**UN/NA NUMBER:** UN 1993

**PACKING GROUP:** II

**ENVIRONMENTAL HAZARDS WATER:** Marine Pollutant

**SECTION XV - REGULATORY INFORMATION**

**TSCA STATUS:** All chemicals are listed or exempt.

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** **Hexane** (110-54-3) Reportable Quantity = 5,000 lbs

**SARA 311/312 HAZARD CATEGORIES:** Flammable (gases, aerosols, liquids, solids). Skin corrosion or irritation. Reproductive toxicity. Specific target organ toxicity (single or repeated exposure). Aspiration hazard.

**SARA 313 REPORTABLE INGREDIENTS:** **n-Hexane** (110-54-3)

**CLEAN WATER ACT:** **Hexane** (110-54-3) is a hazardous substance.

**STATE REGULATIONS: California Proposition 65: WARNING:** This product can expose you to chemicals including Benzene, which is 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](http://www.P65Warnings.ca.gov). **Heptane** (142-82-5): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: CA, IL, MA, NJ, PA, RI. **Hexane** (110-54-3): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: CA, NJ, NY, NC, PA, RI, WI. **Isopropyl alcohol** (67-63-0): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: CT, FL, IL, MA, MN, NJ, PA, RI, TN.

**INTERNATIONAL REGULATIONS:** Listed or exempt from listing/notification on the following chemical inventories: Australian Inventory of Industrial Chemicals (AIIC, Australia); Domestic Substances List (DSL, Canada); Inventory of Existing Chemical

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Substances in China (IECSC, China); Existing and New Chemical Substances (ENCS, Japan); Korean Existing Chemicals Inventory (KECI, Korea); Philippine Inventory of Chemicals and Chemical Substances (PICCS, Philippines).

**VOLATILE ORGANIC COMPOUNDS (VOC): 70%**

**NFPA HEALTH:** 2  
**NFPA FLAMMABILITY:** 3  
**NFPA REACTIVITY:** 0  
**NFPA OTHER:** None

**HMIS HEALTH:** 2  
**HMIS FLAMMABILITY:** 3  
**HMIS REACTIVITY:** 0  
**HMIS PROTECTION:** B

<b>SECTION XVI - OTHER INFORMATION</b>
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**PREPARATION BY:** Roberto Cerón  
**DATE PREPARED:** 11/22/2021  
**REVISION DATE:** N/A

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

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