SECTION I - IDENTIFICATION

PRODUCT IDENTIFIER: REPEL
PRODUCT CODE: 7622, 9862, 8438
RECOMMENDED USE: Snow Repellent
RESTRICTIONS ON USE: None known.
COMPANY NAME: TIFCO Industries, Inc.

COMPANY ADDRESS: PO Box 40277, Houston, TX 77240

COMPANY PHONE: 281-571-6000 **EMERGENCY PHONE:** 800-255-3924

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION: Flammable Aerosol: Category 1

Gases Under Pressure: Liquefied Gas

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 Skin Sensitization: Category 1

HAZARD STATEMENT(S): DANGER: Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to the central and peripheral nervous systems, brain, lungs kidneys and reproductive system through prolonged or repeated exposure. May be fatal if swallowed and enters airways. May cause an allergic skin reaction.

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. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves, protective clothing and eye or face protection. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. Contaminated work clothing must not be allowed out of the workplace. 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. Do not breath fumes, mist, vapors or 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 a doctor. Do NOT induce vomiting. Store locked up. Dispose of contents/container in accordance with local/regional/national guidelines.

SYMBOL:









HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Hexane	110-54-3	40-50%
n-Butane	106-97-8	15-20%
Heptane	142-82-5	10-20%
Propane	74-98-6	5-10%
Distillates (petroleum), light distillate hydrotreating process, low-	68410-97-9	5-15%
hoiling		

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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.

INGESTION: If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice or attention.

INHALATION: Move to fresh air. If breathing is difficult or unconscious, administer oxygen. If not breathing administer artificial respiration. Seek medical attention if irritation persists.

SKIN: Wash skin thoroughly with soap and water. Remove contaminated clothing and shoes, launder before reuse. If irritation persists seek medical attention.

ACUTE HEALTH HAZARDS: Eyes: redness, tearing, blurred vision

Skin: defatting and dermatitis

Inhalation: Anesthetic, irritation, Central Nervous System depression Oral: abdominal irritation, nausea, vomiting, diarrhea, and aspiration risk

CHRONIC HEALTH HAZARDS: Excessive exposure may result in peripheral neuropathies due to n-hexane. Symptoms would be sensory numbness and possible motor weakness in extremeties.

NOTE TO PHYSICIAN: 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 full protective clothing and NIOSH approved SCBA with full facepiece operated in positive pressure or pressure demand. Use water mist to keep material cool in fire situations.

UNUSUAL FIRE AND EXPLOSION HAZARDS: EXTREMELY FLAMMABLE. Contents under pressure. Exposure to temperatures above 122 °F (50 °C) may cause bursting. Keep away from heat, sparks, open flames and other sources of ignition. HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon.

SECTION VI - ACCIDENTAL RELEASE MEASURES

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

SPILL: Absorb with non-combustible material like vermiculite, sand or earth and rinse with small amount of soapy water. Do not allow to drain into sewers or storm drains. Dispose of in accordance with local, state and federal regulations.

WASTE DISPOSAL: Dispose of in accordance with local, state and federal regulations. Do not reuse, puncture or incinerate container. Wrap container and place in trash collection.

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: Wear proper personal protective equipment when using this product. Avoid contact with skin, eyes and clothing. Do not inhale mist or vapor. Store in cool, dry, ventilated area. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

OTHER PRECAUTIONS: Keep out of the reach of children.

INCOMPATIBILITY: Strong oxidizing agents, strong reducing agents.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Hexane	500 ppm	50 ppm
n-Butane	1000 ppm	1000 ppm
Heptane	500 ppm	400 ppm
Propane	1000 ppm	1000 ppm
Distillates (petroleum), light distillate	Not Established	200 ppm
hydrotreating process, low-boiling		

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.

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RESPIRATORY PROTECTION: If exposure levels are exceeded then organic vapor cartridge respirator or SCBA will be needed.

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

ADDITIONAL MEASURES: Wear protective clothing to prevent repeated or prolonged contact with product. Wash hands thoroughly

after handling.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless spray.

ODOR: Solvent.

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): Extremely flammable aerosol. 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 (H2O=1): 0.68 - 0.71

SOLUBILITY(IES): N/D

PARTITION COEFFICIENT: n-OCTANOL/WATER (Kow): 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: Oxides of carbon, various hydrocarbons.

SECTION XI - TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: n-Hexane (110-54-3): LD₅₀ (Oral, Rat) > 5000 mg/kg; LD₅₀ (Dermal, Rabbit) > 2000 mg/kg; LC₅₀ (Inhalation, Rat, 4h) > 20 mg/L. **n-Butane** (106-97-8): LC₅₀ (Inhalation, Rat, 4h) 30957 mg/m³. **Heptane** (142-82-5): LD₅₀ (Oral, Rat) > 15000 mg/kg; LD₅₀ (Dermal, Rabbit) > 3160 mg/kg; LC₅₀ (Inhalation, Rat, 4h) 103 mg/L. **Propane** (74-98-6): LC₅₀ (Inhalation, Rat, 4h) 658 mg/L.

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin **EYES:** May cause irritation, pain, redness, tearing, swelling.

INGESTION: May cause gastrointestinal irritation, nausea, diarrhea, vomiting, aspiration hazard.

INHALATION: May cause respiratory tract irritation, dizziness, headaches, drowsiness, unconsciousness.

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 (CNS).

ACUTE HEALTH HAZARDS: Eyes: redness, tearing, blurred vision

Skin: defatting and dermatitis

Inhalation: Anesthetic, irritation, Central Nervous System depression

Oral: abdominal irritation, nausea, vomiting, diarrhea, and aspiration risk

CHRONIC HEALTH HAZARDS: Excessive exposure may result in peripheral neuropathies due to n-hexane. Symptoms would be sensory numbness and possible motor weakness in extremeties.

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CARCINOGENICITY: OSHA: No ACGIH: No NTP: No IARC: No OTHER: CA Prop 65

SECTION XII - ECOLOGICAL INFORMATION

ECOTOXICITY: This material is toxic to aquatic life.

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 in accordance with local, state and federal regulations. Do not reuse, puncture or incinerate container. Wrap container and place in trash collection.

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: Aerosols, Ltd. Qty.

HAZARD CLASS/DIVISION: 2.1 UN/NA NUMBER: UN1950 PACKING GROUP: N/A

AIR SHIPMENT

PROPER SHIPPING NAME: Aerosols, flammable.

HAZARD CLASS/DIVISION: 2.1 UN/NA NUMBER: UN1950 PACKING GROUP: N/A

SHIPPING BY WATER: VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Aerosols.
HAZARD CLASS/DIVISION: 2.1
UN/NA NUMBER: UN1950
PACKING GROUP: N/A

ENVIRONMENTAL HAZARDS WATER: Marine Pollutant.

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All chemicals are listed or exempt.

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

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

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

STATE REGULATIONS: California Proposition 65: WARNING: This product can expose you to chemicals including n-Hexane, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. 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, MA, NJ, NY, NC, PA, RI, WI.

INTERNATIONAL REGULATIONS: All components of this product are on the Canadian DSL list.

VOLATILE ORGANIC COMPOUNDS (VOC): 96%

NFPA HEALTH:2HMIS HEALTH:2NFPA FLAMMABILITY:3HMIS FLAMMABILITY:3NFPA REACTIVITY:0HMIS REACTIVITY:0NFPA OTHER:NoneHMIS PROTECTION:B

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SECTION XVI - OTHER INFORMATION

PREPARATION BY: Mitch Whitney DATE PREPARED: 08/15/2014 REVISION DATE: 02/28/2024

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

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