Purge Plus

SECTION I - IDENTIFICATION

PRODUCT IDENTIFIER: Purge Plus **PRODUCT CODE:** 8165, 9935

RECOMMENDED USE: VOC compliant Contact and Circuit Board cleaner

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: Aerosol Category 1

Skin Irritant: Category 2 Eye Irritant: Category 2A

Specific Target Organ Toxicity (Single Exposure): Category 3

Aspiration Hazard: Category 1

HAZARD STATEMENT(S): DANGER: Extremely flammable aerosol. Pressurized container; may burst if heated. Causes skin and serious eye irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

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

PRECAUTIONARY STATEMENTS: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No Smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn even after use. Protect from sunlight. Do not expose to temperature exceeding 50°C/122°F. Avoid breathing vapors or spray. Wash hands thoroughly after handling. Do not touch eyes. Wear protective gloves, and eye protection. 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 help. IF ON SKIN: wash with plenty of water. If skin irritation occurs: Get medical help. Take off contaminated clothing and wash it before reuse. Use only outdoors or in a well-ventilated area. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell. IF SWALLOWED: Get emergency medical help immediately. Do NOT induce vomiting. Store in a well-ventilated place. 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
Heptane	142-82-5	60-80%
1,1-Difluoroethane	75-37-6	10-30%
Acetone	67-64-1	7-13%
Isopropyl Alcohol	67-63-0	1-5%

Trade Secret Information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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: Aspiration Hazard. Rinse mouth with water. Do not induce vomiting unless directed by medical authority. Seek medical attention if irritation persists.

INHALATION: Move to fresh air. If irritation or other symptoms develop, seek medical attention.

SKIN: Immediately wash with soap and water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation develops.

ACUTE HEALTH HAZARDS: Causes skin and serious eye irritation. May cause drowsiness or dizziness.

CHRONIC HEALTH HAZARDS: None Known.

Purge Plus

NOTE TO PHYSICIAN: Aspiration Hazard. 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, and foam.

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.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No Smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn even after use. Protect from sunlight. Do not expose to temperature exceeding 50°C/122°F.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon and hydrocarbons.

SECTION VI – ACCIDENTAL RELEASE MEASURES

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

SPILL: Clean up with non-combustible material like vermiculite, sand or earth. If many containers are opened, remove ignition sources. Prevent spill from entering sewers, storm drains, and natural waterways.

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

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

OTHER PRECAUTIONS: Keep out of the reach of children.

INCOMPATIBILITY: Strong alkalis, strong oxidizing agents, some plastics, rubber.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Isopropyl alcohol	400 ppm	400 ppm
Heptane	500 ppm	500 ppm
1,1-Difluoroethane	Not Established	1000 ppm
Acetone	1000 ppm	500 ppm

ENGINEERING CONTROLS / VENTILATION: Use only in well-ventilated areas.

RESPIRATORY PROTECTION: Not required with adequate ventilation.

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

ADDITIONAL MEASURES: Wash hands thoroughly after handling.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear Spray

ODOR: Mild.

ODOR THRESHOLD: N/D

pH: N/A

MELTING POINT/FREEZING POINT: N/D

INITIAL BOILING POINT AND BOILING RANGE: Unknown

FLASH POINT: N/D

EVAPORATION RATE: N/D

FLAMMABILITY (solid/gas): Extremely flammable aerosol. **UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:**

LOWER FLAMMABILITY LIMIT: N/A **UPPER FLAMMABILITY LIMIT: N/A 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): 0.71-0.72

Purge Plus

SOLUBILITY(IES): Non-soluble in water.

PARTITION COEFFICIENT: n-OCTANOL/WATER (Kow): N/D

AUTOIGNITION TEMPERATURE: N/D **DECOMPOSITION TEMPERATURE:** N/D

VISCOSITY: N/A

SECTION X - STABILITY AND REACTIVITY

REACTIVITY: If exposed to strong oxidizers, presents explosion hazard. **CHEMICAL STABILITY:** Stable under normal storage conditions.

POSSIBLE HAZARDOUS REACTIONS: None known.

CONDITIONS TO AVOID: Temperatures greater than 122 °F (50 °C) and sources of ignition. **INCOMPATIBLE MATERIALS:** Strong alkalis, strong oxidizing agents, some plastics, rubber. **HAZARDOUS DECOMPOSITION PRODUCTS:** Stable under normal storage conditions.

SECTION XI - TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Heptane (142-82-5) LD50 (Oral, Rat) 15,000 mg/kg; LC50 (Inhalation, Rat, 4hr) 103 g/m3; LD50 (Dermal, Rabbit) 2,000 mg/kg. **Isopropyl Alcohol** (67-63-0) LD50 (Oral,Rat) 5045 mg/kg; LD50 (Oral, Rabbit) 5045 mg/kg; LD50 (Dermal, Rabbit) 12800 mg/kg; LC50 (Inhalation, Rat, 8hr) 16000 ppm. **Acetone** (67-64-1): LD₅₀ (Oral, Rat) 5800 mg/kg; LD₅₀ (Oral, Mouse) 3000 mg/kg; LD₅₀ (Oral, Rabbit) 5340 mg/kg; LC₅₀ (Inhalation, Rat, 8h) 50100 mg/m³; LC₅₀ (Inhalation, Mouse, 4h) 44,000 mg/m³.

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin

EYES: Causes serious eye irritation

INGESTION: May cause gastrointestinal irritation, nausea, diarrhea, vomiting, aspiration hazard. **INHALATION:** Causes dizziness or excessive or prolonged exposure may cause unconsciousness.

SKIN: Causes irritation.

MEDICAL CONDITION AGGRAVATED: None known.

ACUTE HEALTH HAZARDS: Defatting of skin, dermatitis, blurred vision, and abdominal irritation.

CHRONIC HEALTH HAZARDS: None known.

CARCINOGENICITY: OSHA: No ACGIH: No NTP: No IARC: No OTHER: No

SECTION XII - ECOLOGICAL INFORMATION

ECOTOXICITY: Isopropyl alcohol (67-63-0): LC₅₀ (*Pimephales promelas*, 96h) 9640 mg/L; EC₅₀ (*Daphnia magna*, 48h) 13299 mg/L; EC₅₀ (*Desmodesmus subspicatus*, 72h) > 1000 mg/L. Acetone (67-64-1): LC₅₀ (*Oncorhynchus mykiss*, 96h) 5540 mg/L; EC₅₀ (*Daphnia magna*, 48h) 6100 mg/L; EC₅₀ (*Selenastrum quadricauda*, 8d) 7500 mg/L; EC₅₀ (*Psuedomonas putida*, 16h) 1700 mg/L.

PERSISTENCE AND DEGRADABILITY: Component or components of this product are not biodegradable.

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

MOBILITY IN SOIL: This product is mobile in soil.

OTHER ADVERSE EFFECTS: 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 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: UN 1950 PACKING GROUP: N/A

AIR SHIPMENT

PROPER SHIPPING NAME: Aerosols, flammable.

HAZARD CLASS/DIVISION: 2.1 UN/NA NUMBER: UN 1950 PACKING GROUP: N/A

Purge Plus

SHIPPING BY WATER: VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Aerosols.
HAZARD CLASS/DIVISION: 2.1
UN/NA NUMBER: UN 1950
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): Acetone (67-64-1) Reportable Quantity = 5,000 pounds.

SARA 311/312 HAZARD CATEGORIES: None. SARA 313 REPORTABLE INGREDIENTS: None.

STATE REGULATIONS: California Proposition 65: This product does not contain chemicals regulated by California Proposition 65. Heptane (142-82-5) California Director's List of Hazardous Substances, Connecticut hazardous material survey, Illinois toxic substances disclosure to employee act, New Jersey RTK, Massachusetts RTK, Minnesota RTK, Pennsylvania RTK, Rhode Island RTK. Isopropyl Alcohol (67-63-0) Right-to-Know acts for Rhode Island, Pennsylvania, Florida, Minnesota, Massachusetts, New Jersey, Tennesee Connecticut hazardous material survey. Isopropyl alcohol Illinois toxic substances disclosure to employee act.

INTERNATIONAL REGULATIONS: Canadian Domestic Substance List (DSL): All ingredients are listed.

VOLATILE ORGANIC COMPOUNDS (VOC): 75%

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

SECTION XVI - OTHER INFORMATION

PREPARATION BY: William Bell DATE PREPARED: 8/16/2013 REVISION DATE: 09/12/2025

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

DISCLAIMER: To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty expressed or inferred regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.