

MATERIAL SAFETY DATA SHEET (MSDS/SDS)

Brand Name: Pureon

Section 1: Product Identification

- **Product Name** : R410A Refrigerant
- **Chemical Name** : Hydrofluorocarbon Blend (R32/R125)
- **CAS Number** : R32 [75-10-5], R125 [354-33-6]
- **Manufacturer** :
- **Emergency Contact**:

Section 2: Hazard Identification

- **GHS Classification:**
 - **Non-flammable** (Safety Group A1 per ASHRAE 34).
 - **Hazard Statements:**
 - H280: Contains gas under pressure; may explode if heated.
 - H332: Harmful if inhaled (in high concentrations).
 - **Precautionary Statements:**
 - P410+P403: Protect from sunlight/store in a well-ventilated place.
 - P304+P340: If inhaled, remove to fresh air.
- **Potential Hazards:**
 - **Asphyxiant** in high concentrations (displaces oxygen).
 - Decomposes at high temperatures (>200°C), releasing **toxic gases (e.g., hydrogen fluoride)**.
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Section 3: Composition/Information on Ingredients

- **Components:**
 - **R32 (Difluoromethane):** 50% | CAS 75-10-5
 - **R125 (Pentafluoroethane):** 50% | CAS 354-33-6

Section 4: First-Aid Measures

- Inhalation** : Move to fresh air. Seek medical attention if breathing is difficult.
- Skin Contact** : Wash with soap and water.
- Eye Contact** : Flush with water for 15 minutes. Consult a physician.
- Ingestion** : Not a likely route of exposure. Do NOT induce vomiting.

Section 5: Fire-Fighting Measures

- Extinguishing Media** : Use CO₂, dry chemical, or foam.
- Hazards from Fire** : Decomposes to release **hydrogen fluoride (HF)** and **carbonyl fluoride (COF₂)**.
- Protective Equipment** : Wear self-contained breathing apparatus (SCBA).

Section 6: Accidental Release Measures

- Ventilate area** : Avoid ignition sources.
- Personal Precautions** : Wear gloves, goggles, and respiratory protection.
- Containment** : Use a gas-tight recovery system. Do NOT vent to atmosphere.

Section 7: Handling and Storage

- Handling** : Use in well-ventilated areas. Avoid contact with open flames or hot surfaces.
- Storage** : Store in cool, dry, well-ventilated areas away from direct sunlight.

Section 8: Exposure Controls/PPE

Ventilation : Ensure adequate airflow.

PPE : Safety goggles, gloves, and respirator (if working in confined spaces).

Section 9: Physical and Chemical Properties

Appearance : Colorless gas.

Odor : Faint ether-like smell.

Boiling Point : -51.6°C (-60.9°F) at 1 atm.

Vapor Pressure : ~1,600 kPa (232 psi) at 20°C.

Density : 1.15 kg/m³ (gas, 25°C).

Section 10: Stability and Reactivity

Stability : Stable under normal conditions.

Conditions to Avoid: Temperatures >200°C, open flames, or reactive metals (e.g., sodium).

Section 11: Toxicological Information

Acute Toxicity : Low toxicity. High concentrations may cause dizziness, asphyxiation.

Chronic Effects : No known long-term effects from typical exposure.

Section 12: Ecological Information

GWP : 2,088 (CO₂ = 1).

Environmental Impact : High global warming potential. Do NOT release into the atmosphere.

Section 13: Disposal Considerations

- **Dispose** via certified refrigerant reclamation services.
- **Regulatory Compliance:** Follow local laws (e.g., EPA Section 608 in the USA).



Section 14: Transport Information

UN Number : UN1078 (Refrigerant gas, N.O.S.).

Transport Class : 2.2 (Non-flammable gas).

Section 15: Regulatory Information

- **Regulations:**
 - EU F-Gas Regulation (No. 517/2014).
 - U.S. EPA SNAP Program.
 - Listed under REACH.

Section 16: Other Information

Training : Personnel must be trained in safe handling of high-pressure refrigerants.

Revisions :

For more information on Pureon™ refrigerants, visit pureon.ae

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