

Material Safety Data Sheet (MSDS/SDS) Summary for R-290 (Propane)

Brand Name: Pureon

Section 1: Product Identification

Product Name : R-290 Refrigerant

• Chemical Name : Propane

• **Synonyms** : R-290, HC-290, Pureon (brand name)

• **CAS Number** : 74-98-6

• **USE** : Refrigerant (commercial/residential systems), aerosol

propellant, and fuel.

Section 2: Hazard Identification

- GHS Classification:
 - Flammable Gas (Category 1A): H220 (Extremely flammable gas).
 - Gas under Pressure: (Liquefied Gas): H280 (Contains gas under pressure; may explode if heated).
 - Aspiration Hazard: H304 (May be fatal if swallowed and enters airways).
- Key Risks:
 - **Fire/Explosion**: Pureon R-290 is highly flammable; forms explosive mixtures with air.
 - Asphyxiation: Displaces oxygen in confined spaces.
 - Frostbite: Contact with liquid or rapidly expanding gas.

Section 3: Composition

• Component: 100% Propane (Pureon brand).





Section 4: First-Aid Measures

: Move to fresh air; administer oxygen if breathing is difficult. Inhalation

Skin/Eye Contact: Thaw frostbite with lukewarm water; do not rub affected areas.

Ingestion : Seek immediate medical attention; do NOT induce vomiting.

Section 5: Fire-Fighting Measures

Extinguishing Media : CO₂, dry chemical, or water spray (cool containers).

Hazards : Pureon R-290 vapors can ignite and flash back to the

source. Evacuate and fight fires from a safe distance.

Section 6: Handling and Storage

: Use Pureon R-290 in well-ventilated areas; ground equipment to Handling

prevent static sparks.

Storage : Store Pureon-branded cylinders upright in cool, dry, well-

ventilated areas (<50°C). Keep away from oxidizers.

Section 7: Exposure Controls/PPE

Ventilation : Mechanical ventilation mandatory.

PPE : Insulated gloves, safety goggles, flame-resistant clothing.

Section 8: Physical/Chemical Properties

Appearance : Colorless gas; odorless (may be odorized for leak detection).

: -42.1°C **Boiling Point**

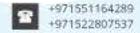
Flammability Range: 2.1–9.5% (in air).

Vapor Density : 1.55 (heavier than air).

Section 9: Stability & Reactivity

Stable, but reacts violently with strong oxidizers (e.g., chlorine). Odor Faint ether-like smell.

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Section 10: Ecological Information

GWP : 3 (negligible global warming potential).

ODP : 0 (non-ozone depleting).

Section 11: Disposal

Recover/recycle Pureon R-290 using approved equipment. Never vent; follow Pureon's disposal guidelines.

Section 12: Transport Information

UN Number : 1978

Shipping Name: Propane (Pureon)

Hazard Class : 2.1 (Flammable Gas).

Section 13: Regulatory Information

US EPA: Approved under SNAP for specific refrigeration applications.

EU : Complies with F-Gas Regulation (EU) 517/2014 (low-GWP alternative).

Section 14: Other Information

Key Avantage : Pureon R-290 is an eco-friendly refrigerant (low GWP), but **strict flammability protocols** must be followed.

SDS Source : Always consult the latest Pureon-brand SDS for updates.

Section 15: Note

Pureon R-290 requires specialized handling due to flammability risks. Ensure compliance with safety standards (e.g., IEC 60335-2-89 for appliances) and use leak detection systems.

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

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