

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

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

- Handling** : Use Pureon R-290 in well-ventilated areas; ground equipment to 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).
- Boiling Point** : -42.1°C
- 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.

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 Advantage : 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

The information set forth herein is furnished free of charge and based on technical data that pureon believes to be reliable. It is intended for use by persons having technical skill, at their own risk. Because conditions of use are outside our control, pureon makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe, any patents or patent applications.

© 2025 Total Air Gas Pvt. Limited. Pureon™ and any associated logos are trademarks or copyrights of [Company Name]. [Company Trademark]™ and the [Company Logo] are trademarks of [Company Name].

Replaces: [Previous Document Code]
[New Document Code] ([Month/Year]).

