

ISCEON® 79 *(R-422A)

ISCEON® 79 Refrigerant

*R-422A

248FP IPDS14 Version 4.0 Jan. 2005

*Pending ASHRAE public review

IDENTIFICATION

C.A.S. N° : Not Applicable
 SYNONYM(S) : R-125/134a/600a

CHEMICAL NAME

Blend of
 1,1,1,2,2-pentafluoroethane
 1,1,1,2-tetrafluoroethane and
 2-methylpropane

CHEMICAL FORMULA

Blend of
 CHF_2CF_3 [354-33-6]
 $\text{CH}_2\text{F}\text{CF}_3$ and [811-97-2]
 $\text{CH}_3(\text{CH}_3)\text{CHCH}_3$ [75-28-5]

MOLECULAR WEIGHT

$M_r = 113.6$

GENERAL CHARACTERISTICS

Liquefied gas,
 under pressure

R-125
 R-134a
 R-600a

} Composition
 as defined by: ASHRAE
 Standard 34

Purity of total blend components..... 99.8% minimum

SPECIFICATIONS

Ref: Rhodia UK Ltd Avonmouth Specification QCS 261

VAPOUR PHASE CONTAMINANTS

* Air and other non-condensables (% by vol). 1.5 maximum
 ARI 700-95 App C Method

LIQUID PHASE CONTAMINANTS

* Water Content (ppm by weight)..... 10 maximum
 ARI 700-95 App C Method

* High Boiling Residue (% by volume)..... 0.01 maximum
 ARI 700-95 App C Method

* Acidity (ppm by weight)..... 1 maximum
 ARI 700-95 App C Method

* Chlorides (no visible turbidity)..... pass
 ARI 700-95 App C Method

} As defined by:
 Air-conditioning &
 Refrigeration Institute
 (ARI)
 Standard
 700-99

PHYSICAL and PHYSICOCHEMICAL PROPERTIES

These properties may vary with batch or method used. They are only given for guidance and DO NOT form part of any formal specification or agreement between Rhodia UK Limited and any third party.

◆ Bubble Point at 1 Atm.....	-48.63 °C
◆ Dew Point at 1 Atm.....	-46.14 °C
◆ Vapour Pressure at 25°C:.....	12.83 BarA
◆ Liquid Density at 25°C:.....	1134 kg.m ⁻³
◆ Critical Temperature:.....	71.7 °C
◆ Critical Pressure:.....	37.48 BarA
◆ Ratio of Specific Heats at 1 Atms at 25°C (C _p /C _v):.....	1.105
◆ Thermal Conductivity (liquid) at 25°C:.....	0.062 W/m°C
◆ Flammability.....	Non Flammable
◆ Ozone Depletion:.....	Zero
◆ GWP _(100yr) (IPCC1995):.....	2530
◆ Solubility:	
Water.....	Slightly soluble (about.0.12g/100 g)
Organic solvents.....	Soluble

Full Thermodynamics Data are available on request.

APPLICATIONS

Direct replacement for low temperature, typically R-502 or R-22 Refrigeration systems. Used with traditional mineral oil. It can also be used with alkyl benzene and ester lubricants.

It has Zero Ozone Depletion Potential.

COMPATIBILITY

Compatible with metals, plastics and elastomers traditionally found in refrigeration systems and compressors. Compatible with HFC system materials.

PACKAGING AND TRANSPORT

* Packaging :

- Steel pressure cylinders (returnable), 11.5 kg, 56kg and 900 kg net weight.
- Steel pressure cylinders, 12.5 kg net weight.
- Pressurised ISO tanks

* Transport :

INLAND

- UK Carriage of Dangerous Goods & Transportable Pressure Equipment Regulations (2004)
- International legislation (RID-ADR)

SEA FREIGHT (IMDG)

AIR FREIGHT (IATA)

Regulated :

For more details, please consult our Material Safety Data Sheet**.

STORAGE CONDITIONS

Store cylinders out of direct sunlight and away from heat sources.

Please consult our Material Safety Data Sheet** for more detailed information.

SAFETY INSTRUCTIONS

Please consult our Material Safety Data Sheet**

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WARNING TO USERS

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Rhodia UK Ltd