



Koura Klea® 134a

A world leader in refrigerants

134a refrigerant* is widely accepted as the industry alternative for R-12 for both retrofit and new equipment. It is a zero ozone-depleting (ODP)** material and matches R-12 performance in both medium and high-temperature air conditioning points. Klea® 134a has been the industry standard for automotive air conditioning and is a component in HFO blends delivering lower global warming potential (GWP)**.

* R-12 may no longer be used.

** Zero ODP is characteristic to 134a.

Application



Air Conditioning



Automotive



Fluor & Energy
Materials

Koura

Klea® 134a (R-134a) Refrigerant Physical Properties

Property	S.I. Units	Value	British Units	Value
Molecular Weight	kg/kmol	102.03	lbm/lbmol	102.03
Critical Temperature	°C	101.06	°F	213.91
Critical Pressure	bara	40.59	psia	588.75
Critical Density	kg/m ³	511.90	lb/ft ³	31.96
Normal Boiling Point	°C	-26.074	°F	-14.933
Latent Heat of Vapourisation at Atmospheric Pressure	kJ/kg	216.97	BTU _{IT} /lb	93.28
Saturated Vapour Density at Atmospheric Pressure	kg/m ³	5.2581	lb/ft ³	0.33
Liquid Vapour Pressure at 25°C	bara	6.6538	psia	96.51
Coefficient of Volumetric Thermal Expansion for Saturated Liquid at	°C ⁻¹	0.0032364	°F ⁻¹	0.00180
Speed of Sound* for Saturated Vapour at 25°C	m/s	144.26	ft/s	473.29
Adiabatic Exponent* for Saturated Vapour at 25°C		1.23		1.23
Latent Heat of Vapourisation at 25°C	kJ/kg	177.780	BTU _{IT} /lb	76.43
Saturated Vapour Density at 25°C	kg/m ³	32.350	lb/ft ³	2.020
Saturated Vapour Density at 0°C	kg/m ³	14.428	lb/ft ³	0.901

* Vapour composition as per bulk refrigerant at dew

Features and benefits

- Non-flammable
- Global commercial availability as the industry standard*
- Zero ODP**
- Low toxicity and flammability as an ASHRAE A1 refrigerant
- Can recharge system in liquid or vapor state
- Balance of capacity and efficiency for system performance
- Compatible with most air conditioners and medium temperature refrigeration systems

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** Zero ODP is characteristic to 134a.

For more information, contact info@kouraglobal.com Safety Data Sheets available at kouraglobal.com

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