



R-717

ANHYDROUS AMMONIA NH₃

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION	LIMIT VALUE
Purity	≥ 99.98 % weight
Water content	≤ 200 ppm weight
Oil content	≤ 3 ppm weight

MAIN APPLICATIONS

R-717 (Ammonia) is one of the oldest refrigerant fluids still used. It is used in absorption and compression systems, mainly for industrial applications, with reciprocating and screw compressors.

OILS

Use a mineral (MO) or polyalphaolefin (PAO) oil. Check with **Climalife** regarding the viscosity of the oil selected for your application, and the miscibility with the fluid under consideration.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet*.

REGULATION

Ammonia is a product classified as toxic and flammable.

Refer to the decree of July 16, 1997 published in Official Journal of October 3, 1997.

* Find the Safety Data Sheet (SDS) directly on our website www.climalife.dehon.com



R-717 PHYSICOCHEMICAL PROPERTIES

Molar mass	g/mol	17.03
Triple point	°C	- 77.9
Boiling point (at 1.013 bar)	°C	- 33.5
Saturated fluid density at 25°C	kg/dm ³	0.602
Saturated vapour density at boiling point	kg/m ³	0.890
Vapour pressure at: 25°C 50°C	bar bar	10.03 20.33
Critical temperature	°C	132.35
- critical pressure	bar	113.53
- critical density	kg/m ³	234
Latent heat of vaporisation at boiling point	kJ/kg	1367.9
Dielectric rigidity at 20°C and 8.46 bar	Nitrogen = 1	0.82
Surface tension at 30°C	10 ⁻³ N/m	28.5
Solubility of the fluid in water at 0° C at 20° C at 30° C	g/l g/l g/l	900 520 407
Viscosity at 30°C - liquid - vapour at 1.013 bar	10 ⁻³ Pa.s (centipoise)	0.136
Specific heat capacity at 30°C - liquid - vapour at 1.013 bar	kJ/(kg.K) kJ/(kg.K)	4.78 2.16
Cp/Cv ratio at 25°C at 1.013 bar		1.335
Flammability in air	T° inflammation	630° C
Explosive limit at 20°C and 1.013 bar Lower Upper		15.4% vol. 33.6% vol.
ASHRAE classification		B2
Potential effect on ozone	(R11 = 1)	0

Please contact your distributor or **Climalife** sales department for more information. In addition, if the refrigeration system you want to install, or are working on, does not appear to be a typical installation, please do not hesitate to contact us for advice and information.

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