



## R-717

### ANHYDROUS AMMONIA $\text{NH}_3$

#### GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION	LIMIT VALUE
Purity	$\geq 99.98$ % weight
Water content	$\leq 200$ ppm weight
Oil content	$\leq 3$ 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 (MN) 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 mildly 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](http://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 <sup>3</sup>	0.602
Saturated vapour density at boiling point	kg/m <sup>3</sup>	0.890
Vapour pressure at: 25°C 50°C	bar bar	10.03 20.33
Critical temperature - critical pressure - critical density	°C bar kg/m <sup>3</sup>	132.35 113.53 234
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 <sup>-3</sup> 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 <sup>-3</sup> 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		B2L
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.

*The information contained in this product sheet is the result of our studies and experience. It is provided in good faith, but should not, under any circumstance, be taken to constitute a guarantee on our part or an assumption of our responsibility. This is particularly the case when third party rights are at stake or in situations where a user of one of our products fails to observe applicable regulations.*



For more information, visit our website:  
[climalife.com/contact\\_us](http://climalife.com/contact_us)



web