

## Chapter Comm 43 APPENDIX

The material contained in this appendix is for clarification and general information only.

### Physical Properties of Ammonia

Molecular symbol .....	NH <sub>3</sub>
Molecular weight .....	17.031
Boiling point at one atmosphere* .....	-28°F
Melting point one atmosphere* .....	-107.9°F
Critical temperature .....	271.4°F
Critical pressure .....	1657 psia
Latent heat at -28°F and one atmosphere* .....	589.3 Btu/lb
Relative density of vapor compared to dry air at 32°F and one atmosphere* .....	0.5970
Vapor density at -28°F and one atmosphere* .....	0.05555 lb/ft <sup>3</sup>
Specific gravity of liquid at -28°F compared to water at 39.2°F .....	0.6819
Weight per gallon of liquid at -28°F .....	5.69 lbs/gallon
Liquid density at -28°F and one atmosphere .....	42.57 lbs/ft <sup>3</sup>
Specific volume of vapor at 32°F and one atmosphere .....	20.78 ft <sup>3</sup> /lb
Flammable limits by volume in air at atmospheric pressure .....	16% to 25%
Ignition Temperature (in a standard quartz container) .....	1562°F
Specific Heat, Gas, at 59°F and one atmosphere*	
at constant pressure, C <sub>p</sub> .....	0.5232 Btu/lb°F
at constant volume, C <sub>v</sub> .....	0.3995 Btu/lb°F

\*One atmosphere = 14.7 psia