Chapter Comm 43

APPENDIX

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

Physical Properties of Ammonia

Molecular symbol	NH_3
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^3
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^3
Specific volume of vapor at 32°F and one atmosphere	20.78 ft^3/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_p	0.5232 Btu/lb°F
at constant volume, C_v	0.3995 Btu/lb°F

*One atmosphere = 14.7 psia