

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