

ACNV = $\text{NH}_4\text{Cl} / (\text{ZnCl}_2 + \text{FeCl}_2 + \text{FeSO}_4 + \text{CaCl}_2 + \text{NaCl} + \text{KCl} + \text{MnCl}_2 + \text{MgCl}_2)$. Ammonium chloride (NH_4Cl) is determined by an outside lab via TKN (total Kjeldahl nitrogen). TKN times 3.82 = NH_4Cl . For the denominator use trial/error across the row of the baume' of the flux.

Example: The outside lab gave a result of 33.3 g/L for TKN times 3.83 = 127 g/L NH_4Cl for a 12 deg. Baume' flux. From Table 1 on the 12 deg. row by trial and error. Quad. Flux at 81 g/l ZnCl_2 plus other non-volatiles "fits." $\text{ACNV} = 127/81$ (ACNV = 1.57). For values not on the table, interpolation is used.

Table 1 Density (75 F Baume' and Specific Gravity) of ZnCl_2 (& other non-volatiles) in Fluxes

| Density | | -----Zinc Chloride (grams/Liter) in Flux----- | | | | | |
|--------------------|--------|---|-------|--------|--------|-------|-------|
| Be' | Sp.G | ZnCl ₂ | Mono | Double | Triple | Quad. | Penta |
| ACN | | 0 | 0.393 | 0.785 | 1.18 | 1.57 | 1.96 |
| %ZnCl ₂ | | 100% | 71.8% | 56.0% | 46.0% | 38.9% | 33.8% |
| 7 | 1.0507 | 58 | 52 | 48 | 44 | 42 | 38 |
| 8 | 1.0584 | 68 | 62 | 57 | 52 | 49 | 45 |
| 9 | 1.0662 | 78 | 71 | 66 | 61 | 57 | 52 |
| 10 | 1.0741 | 89 | 81 | 75 | 69 | 65 | 59 |
| 11 | 1.0821 | 99 | 92 | 85 | 78 | 73 | 67 |
| 12 | 1.0902 | 110 | 102 | 94 | 87 | 81 | 74 |
| 13 | 1.0985 | 121 | 113 | 104 | 96 | 90 | 82 |
| 14 | 1.1069 | 133 | 123 | 115 | 105 | 98 | 89 |
| 15 | 1.1154 | 144 | 134 | 125 | 115 | 107 | 97 |
| 16 | 1.1240 | 156 | 146 | 135 | 125 | 116 | 105 |
| 17 | 1.1328 | 168 | 157 | 146 | 135 | 125 | 113 |
| 18 | 1.1417 | 180 | 169 | 157 | 145 | 134 | 121 |
| 19 | 1.1508 | 192 | 180 | 168 | 155 | 143 | 129 |
| 20 | 1.1600 | 204 | 192 | 179 | 165 | 153 | 138 |
| 21 | 1.1694 | 216 | 204 | 191 | 175 | 162 | 146 |
| 22 | 1.1789 | 229 | 216 | 202 | 186 | 172 | 155 |
| 23 | 1.1885 | 241 | 228 | 214 | 196 | 181 | 163 |
| 24 | 1.1983 | 254 | 241 | 225 | 207 | 191 | 172 |
| 25 | 1.2083 | 267 | 253 | 237 | 218 | 201 | 181 |
| 26 | 1.2186 | 279 | 266 | 249 | 229 | 211 | 190 |
| 27 | 1.2289 | 292 | 278 | 261 | 240 | 221 | 199 |
| 28 | 1.2393 | 306 | 291 | 273 | 251 | 231 | 208 |
| 29 | 1.2500 | 319 | 304 | 286 | 263 | 241 | 217 |
| 30 | 1.2609 | 332 | 317 | 298 | 274 | 252 | 226 |