

Measurement of Grain Moisture with Hygrometer



- Place handful of grain (maize shown) in small sealable bag with hygrometer.
- Push air out and seal bag.
- Place bag in shaded area.





If above 65%, too wet OR

If below 65%, good for storage OR

If below 60%, good for market







Equilibrium Moisture Content

Table below is for maize only.

Using the values from the hygrometer (humidity and temperature), this table can be used to estimate the maize moisture content.

| | Relative Humidity (%) | | | | | | | |
|------------------|-----------------------|------|------|------|------|------|------|------|
| Temperature (°C) | | 50 | 55 | 60 | 65 | 70 | 75 | 80 |
| | 15 | 11.9 | 12.6 | 13.3 | 14.1 | 14.9 | 15.8 | 16.8 |
| | 18 | 11.6 | 12.3 | 13.0 | 13.8 | 14.6 | 15.5 | 16.6 |
| | 21 | 11.4 | 12.0 | 12.8 | 13.5 | 14.3 | 15.3 | 16.3 |
| | 24 | 11.1 | 11.8 | 12.5 | 13.3 | 14.1 | 15.0 | 16.1 |
| | 27 | 10.8 | 11.5 | 12.3 | 13.0 | 13.9 | 14.8 | 15.9 |
| | 30 | 10.6 | 11.3 | 12.0 | 12.8 | 13.6 | 14.6 | 15.6 |
| | 33 | 10.4 | 11.1 | 11.8 | 12.6 | 13.4 | 14.4 | 15.4 |
| | 36 | 10.2 | 10.9 | 11.6 | 12.4 | 13.2 | 14.2 | 15.2 |

Calibrate the Hygrometer



- Place salt in water bottle cap, then add enough water to wet the salt.
- Place in bag with the hygrometer.
- After 24 hours, hygrometer should read between 70+74%.
- If reading is not correct, hygrometer needs replacing.