

Calculation of the Water Content

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Projekt Orbit | Dr. W. Bidlingmaier | Bauhaus Universität Weimar | www.orbit-online.net**1 Water Content related to the wet substance (normal in waste management):**

$$WG_{FS} = \frac{m_w}{m_f} * 100 \quad [\text{Gew.} - \% \text{FS}]$$

WG_{FS}	Water related to the wet substance	[Gew.-% FS]
m_w	Mass of water	[g]
m_f	Mass of the wet sample	[g]

2 Water Content related to the dry sample (normal in Soil science and soil mechanics):

$$WG_{TS} = \frac{m_w}{m_d} * 100 \quad [\text{Gew.} - \% \text{TS}]$$

WG_{TS}	Water related to the dry substance	[Gew.-% TS]
m_w	Mass of water	[g]
m_d	Mass of the dry sample	[g]

$$m_w = a - b$$

a=	original sample wight wet sample	[g]
b=	original sample wight after drying at 105 °C	[g]