Sulphuric Acid Dew Point of Flue Gas

11/10/2026

Project: acid-dew-point

Input Parameters

Water vapour in flue gas	10.000 %
Flue gas pressure (absolute)	1.0132 bar
SO_3 source	Estimate from fuel sulphur
Sulphur in fuel (as fired)	2.5000 %
Specific wet flue gas volume	10.000 Nm^3/kg
$SO_2 \rightarrow SO_3$ conversion	2.0000 %
SO_3 in flue gas	15.000 ppm

Calculated Results

Acid dew point	150.14 °C
SO_3 used in the correlation	0.003496 %
SO_2 from the fuel sulphur	0.17478 %
Partial pressure of water vapour	0.10132 bar
Partial pressure of SO_3	3.5419e-05 bar