

# SOP-M Soluble

<b>Chemical Product:</b>	Potassium Magnesium Sulphate
<b>Chemical Formula:</b>	$K_2SO_4 \cdot MgSO_4 \cdot 4H_2O$
<b>Appearance:</b>	White; very fine particles
<b>Product Samples:</b>	Samples available on request

## Chemical Analysis<sup>1</sup>

Component		(w%)
Potassium Sulphate <sup>2</sup>	$K_2SO_4$	47.0
Potassium Oxide	$K_2O$	25.5
Magnesium Sulphate <sup>2</sup>	$MgSO_4$	32.0
Magnesium Oxide	$MgO$	10.8
Sodium Chloride <sup>2</sup>	$NaCl$	0.7
Chlorine	$Cl$	0.4
Sulphate <sup>2</sup>	$SO_4$	46.3
Sulphur	$S$	15.5
Moisture	$H_2O$	0.3

Heavy Metals	(ppm)
Arsenic	< 1.0
Cadmium	< 1.0
Copper	< 1.0
Mercury	< 0.1
Lead	< 1.0

## Granulometry<sup>1</sup> (AS 1289 3.6.3, 3.5.1)

Tyler Mesh	Opening (mm)	Passing (w%)
14	1.18	100.0
28	0.6	99.9
35	0.425	99.8
48	0.3	97.7
100	0.15	64.4
200	0.075	15.5

## Solubility

Temperature	(g/l)
25 °C	306
35 °C	333
45 °C	381
55 °C	448
65 °C	536

## Physical Properties<sup>1</sup>

Bulk Density (Loose)	ca. 827 kg/m <sup>3</sup>	(ASTM D7481)
Bulk Density (Packed)	ca. 913 kg/m <sup>3</sup>	(ASTM D7481)
Angle of repose	ca. 25.4°	(AS 2879.12)

<sup>1</sup> Analysis of pilot plant product samples exclusively manufactured from Colluli ore

<sup>2</sup> Equivalent