



>>Entry Name: Aluminium potassium sulfate ($\text{AlK}(\text{SO}_4)_2$)

ENTRY UNDER REVIEW

Synonym(s): Sulfuric acid, aluminium potassium salt (2:1:1), 8Cl. Anhydrous alum

CAS Registry Number: 10043-67-1

Related CAS Registry Numbers(s): 14635-80-4

Extra CAS Registry Numbers(s): 15007-61-1

$\text{KAl}(\text{SO}_4)_2$

Molecular Formula: AlKO_8S_2

Molecular Weight: 258.207

Accurate Mass: 257.848706

²⁽⁻⁾ between

Source/Synthesis: Synth. by dehydration of the alum

Use/Importance: Commercially available. Coagulating agent for rubber; also used in deodorants and waste water treatment

Physical Description: Colourless hexagonal plates (H_2SO_4)

Solubility: Sol. H_2O (7.74 g per 100 cm^3 at 30°); insol. EtOH

Other Data: Corresp. $\text{NH}_4^{(+)}$, $\text{Rb}^{(+)}$, $\text{Cs}^{(+)}$ salts also descr. $\Delta H_f^\circ -2470 \text{ kJ mol}^{-1}$; $\Delta G_f^\circ -2240 \text{ kJ mol}^{-1}$; $S^\circ 205 \text{ J K}^{-1} \text{ mol}^{-1}$

Fluka: 60055