

# PAF (Potassium Aluminium Fluoride)



## For removal of Mg from aluminium alloy melts.

Potassium Aluminium Fluoride [PAF] is used to remove alkali earth metals [particularly Mg, but also Li and Ca] from molten aluminium alloys.

PAF rapidly combines with Mg to form a complex fluoride liquid slag which can be skimmed off. If smaller quantities are used then oxides will absorb the liquid slag and the dross can be removed as normal.

## Composition / Properties

PAF is a fused inorganic salt which is a non-stoichiometric mixture of  $K_3AlF_6$  and  $KAIF_4$ . PAF from AMG has the following typical composition and properties:

Product	K	Al	F	Fe	Si	Ti	Ca	Form
PAF	25-30%	18-20%	45-50%	0.5%	0.15%	0.1%	0.1%	Powder / lump

*Composition is a maximum unless shown as a range.*

## Form & Packaging

PAF is available as Minus 16# (-1mm) graded powder or in lump form. Packaging options as follows:

- 1) 25kg paper sacks, packed as nominal 1 metric ton, shrink-wrapped on pallets
- 2) Nominal 1 metric ton bulk bags, shrink-wrapped on pallets

## Addition Practice

PAF is added to the molten bath and thoroughly stirred in. The exact amounts to be added will vary depending on the level of Mg to be removed.

