

DEGASSING TABLETS FOR THE REMOVAL OF DISSOLVED HYDROGEN FROM MOLTEN ALUMINIUM AND ITS ALLOYS

Aluminium alloys are susceptible to the absorption of hydrogen, that it is produced by the reaction of aluminium with the atmospheric moisture. At the end of the melting process it is important to eliminate hydrogen and eventual others gases dissolved in the alloy in order to avoid the formation of cavities or porosities in castings, that cause a worsening of their characteristics.

One of the methods to carry out the degassing is the use of products in tablet form that develop a purging gas for the removal of hydrogen and others gases from the melt.

PROTECME supply tablets both to be plunged and self-sinking.

The principal products are indicated on the following list.

PRODUCT	COLOUR	PURGING GAS	ACTION	APPLICATION RATE (%)	PLUNGING	NOTES
DEGASAL C2	Blue	Chlorine	Degassing and grain refining	0.20 - 0.25	Perforated plungers	For Al and all alloys.
DEGASAL C3	Pink	Chlorine	Degassing	0.20 - 0.25	Perforated plungers	For Al/Si, Al/Cu and Al/Si/Cu. Contains oxidizing agents to avoid carbon segregation.
DEGASUB	Grey	Chlorine	Degassing	0.10 - 0.15	Self-sinking	Used in large reverberatory furnaces. Releases metallic Mn and Fe.
PROTECOL	Grey	Nitrogen plus some CO ₂	Degassing	0.25 - 0.30	Perforated plungers	For Al/Si, Al/Cu alloys. Does not develop dangerous gases.
DEGASUB SF	Grey	Nitrogen plus some CO ₂	Degassing	0.05 - 0.10	Self-sinking	To wash Al/Si, Al/Cu alloys in pressure die casting foundries.

