

- **RAPID DISSOLUTION** at normal casthouse operating temperatures.
- **CONCENTRATED FORM** means reduced inventory, transport and storage costs compared with binary master alloys.
- **HIGH ELEMENT RECOVERY** - typically over 95%.
- **MINIMAL TEMPERATURE LOSS** upon addition.
- **ACCURATE AND CLEAN ADDITION** with no weighing needed for packaged product.
- **RAPID, CONSISTENT SOLUBILITY** of SELF-SINKING tablets means **LESS ENERGY** and **LESS COST**.
- **PRECISE WEIGHT** and **EASY HANDLING** with colour-coded, light-weight packs.

AMG's ALTAB™ alloying tablets are used in casthouses world-wide for the manufacture of high-quality aluminium alloys. In applications such as rolling ingot for foilstock and canstock, billet for precision extrusions

and high-quality foundry casting alloys. For the precise compositional adjustment of alloy melts or for bulk element addition, ALTAB™ is the optimum choice.

ALTAB™'s popularity has grown steadily since its introduction in the early 1980s. These concentrated additives are a carefully controlled mixture of alloying element (75%, 80%, 85% and in some cases up to 100%) in powder, sponge or needle form, aluminium powder and optional sodium-free non-hygroscopic flux. Dissolution relies on the alloying element powder particles forming aluminides. Stirring the melt greatly enhances dispersion of the aluminides, resulting in improved recoveries.

Some ALTAB™ grades contain flux – preferred where speed of dissolution is important or when low melt temperatures and stirring difficulty are issues. The flux aids in removal of the oxide film found on any powder, sponge or needle particle to expose the metallic element to molten aluminium, promoting rapid dissolution.

ALTAB™ Recommended Addition Practice

The following is a guide to the efficient use of ALTAB™ tablets for alloy additions in aluminium casthouses.

When the aluminium bath [ALTAB™ can also be added in the transfer ladle] has reached a holding temperature of approximately 720°C, or 760°C for Ti ALTAB™, [dissolution will be slower at lower temperatures], ALTAB™ additions can be made as follows:

1. Move to the sides of the furnace any dross which has built up on the surface charge. This will allow the ALTAB™ tablets to sink quickly under the surface of the molten metal [otherwise a significant loss in yield is likely].

2. Add the ALTAB™ at different points of the furnace to ensure an even distribution. If necessary, the ALTAB™ packs can be cut open and the individual tablets scattered into the melt.














3. Once the ALTAB™ has dissolved stir the furnace thoroughly from the bottom of the bath to the top for 5 to 10 minutes. This will ensure maximum recovery and homogenous composition.

Both temperature and composition can be checked before casting begins. The importance of a good stir cannot be over emphasised.

Product Forms and Packaging

ALTAB™ is plastic shrink-wrapped (typical) or aluminium foil-wrapped to reduce dust and to ensure a damage-dry product. ALTAB™ packs are contained in cardboard boxes, and shipped securely stacked on wooden pallets.

Mini-ALTAB™ tablets are supplied in easy-to-handle paper sacks, or in large bulk bags. Distinct color coding packaging ensures clear identification of the alloying element contained.

Element	European Colour Code	AA Colour Code	Symbol	Typical Density (g/cm ³)
Chromium			Cr	4.0
Copper			Cu	4.5
Iron			Fe	4.0
Manganese			Mn	4.0
Nickel			Ni	4.5
Titanium			Ti	2.8
Zinc		-	Zn	4.0

%	Element	Table Weight (Normal)	Tablets per pack	Weight of Elements per pack	Pallet Net Weight
75	Cr, Cu, Fe, Mn, Ni, Zn, Ti	1.333kg 2.96lbs	3	3.0kg 6.1lbs	1728kg 3809lbs
		0.667kg 1.47lbs	4	2.0kg 4.4lbs	1152kg 2539lbs
80	Cr, Cu, Fe, Mn, Ni, Zn, Ti	1.250kg 2.75lbs	3	3.0kg 6.1lbs	1620kg 3571lbs
		0.625kg 1.38lbs	4	2.0kg 4.4lbs	1080kg 2314lbs
85	Cr, Cu, Fe, Mn, Ni, Zn Ti	1.176kg 2.59lbs	3	3.0kg 6.1lbs	1524kg 3360lbs
100	Ti	0.500kg 1.10lbs	4	2.0kg 4.4lbs	864kg 1904lbs

Higher concentrations are available on request. Titanium is also available as 100%.

This table shows standard product specifications and packaging. Please enquire about other options.

All aluminium compacted products are carefully packaged to ensure delivery of clean, dry, clearly identified material.

Note: ALTAB™ and mini-ALTAB™ should both be stored in a dry area, preferably under cover.

Never add wet product to molten metal. Ensure that all materials are dry prior to addition.