

## **ARSAL 2125**

## Highly compacted cleansing and skimming granules

for all hypoeutectic and eutectic aluminium, wrought and casting alloys such as e. g.: G-AlSi10Mg, G-AlSi7Mg, G-AlSi8Cu3, G-AlSi12 and G-AlZn10Si8

## 01 Notes on Technology

Aluminium and aluminium, wrought and casting alloys have the tendency to form oxides and to absorb hydrogen in the liquid state and, in addition, to an undesired dross and aluminium oxide foam formation which has an extremely high portion of metal.

The granules **ARSAL 2125** bind the oxides and transport them to the surface by a flotation process whereby a low-metal dross is obtained by the reduction of the surface tension. In addition to that during the treatment with an impeller the oxides are bound on the melt surface.

**ARSAL 2125** is a highly compacted preparation. Therefore, nearly no dust is released and it can also be used in the lower temperature range of the aluminium melt. The high degree of compaction permits an intensive reaction with the oxides which can easily be controlled thanks to the compactness of the granules (discoloration and dissolution).

## Types of compaction:

ARSAL 2125 is produced as granules or flakes.

- The granules consist of small cylinders of approximately 0.3 g / grain. They enable an important control of the operating staff as they remain their shape and colour if they are not thoroughly stirred in the melt and therefore did not reach the reaction time.
- Flakes look like small crushed stones, weight approximately 0.05 g / grain and have a large
  distribution area. The reaction time is comparable with that of the granules. They reach the
  temperature of the metal faster and loose their colour before reacting. Thus, an effective control
  is very difficult.
- 02 Application Range

**ARSAL 2125** stands out by good storage stability and is applicable within a wide reaction range, i. e. it can also be used in the lower temperature range of the aluminium melt. It is applicable for all aluminium, wrought and casting alloys which may contain small quantities of sodium.

03 Quality Characteristics

**ARSAL 2125** 

- removes oxides from the melt by flotation and reduces the hydrogen content
- produces a fine, powdery and low-metal dross
- works in all types of furnaces and crucibles
- permits the easy removal of adherences
- is of very low smoke and odour emission

04 Addition Rate

Depending on the level of impurities 0.05 – 0.25 % by weight or lower (rule of thumb: half the quantity compared with the powder addition).

05 Product Application

Add **ARSAL 2125** in the pouring stream and stir it with a bell. When using it as cleansing preparation, submerge the required addition slowly and carefully into the melt. Gently stir the rising flotation products with a well pre-heated and coated tool until a fully reacted dross forms and then skim it off.

**ARSAL 2125** is highly suitable for the automatic addition with an impeller system (e. g. MBU of the company FUCO-HEG).

06 Typical Properties

Appearance: blue granules / flakes

Odour: odourless

Reaction temperature: from approximately 580°C (higher temperatures accelerate the reaction)

07 Packaging

25 kg bags, 3-fold with plastics lining, special packaging available.

08 Advice on Special Types of Danger Not applicable.

09 Storage and Shelf Life

Store in a cool place (below 32°C/90°F); keep container dry and tightly closed. The shelf life is at least 6 months if properly stored.

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