

CeBa22

Preconditioning

Application

With the production of GJS and GJV, low oxygen and sulfur content in the base iron is desirable. Preconditioning can be carried out to reduce the oxygen and sulfur content.

CeBa 22 is a preconditioning agent that is introduced before the Mg treatment. The addition of cerium leads to the formation of Ce-O-S compounds that are stable under atmospheric conditions in the temperature range from 1450 to 1550°C. Ce-O-S compounds cannot be altered by atmospheric oxygen. Cerium oxysulfides are very fine (approx. 1 – 3 µm), round in shape and remain suspended in the molten metal owing to their high specific gravity (approx. 6.5 g/cm³). They boost the heterogeneous nucleation catalysis. The formation of dross is countered through the removal of oxygen and sulfur in the base iron by introducing cerium before the magnesium treatment. Barium contributes to the reduction of the oxygen content.

Reference analysis

% Si	58 - 68
% Ca	0.6 – 1.5
% Al	0.8 – 1.8
% Ba	2 - 3
% Ce	1.8 – 2.2

Addition rate

This treatment agent is to be added before the magnesium treatment, i.e. the treatment agent is to be added when tapping the molten metal in order to reduce the oxygen and sulfur. The addition of CeBa 22 is oriented towards the cerium requirement for the removal of oxygen and sulfur to cerium oxysulfide. Depending on the characteristic data available in the foundry for the base iron, added amounts of 0.1 – 0.15% have proven to be sufficient. If necessary, a treatment agent free of cerium or cerium-MM is to be chosen.

Sizing

0.4 - 2.0 mm

Packaging

- 25 kg paper sacks on pallet
- 100 kg steel drums on pallet

The containers are covered with a protective film.

Shelf life and transport

CeBa 22 can be stored indefinitely in its original packaging. The effects of humidity are to be avoided. Relevant hazardous substance regulations must be complied with. Our Shipment Handling department can provide further information. CeBa 22 is not a hazardous substance as defined by transport regulations.

The data in this information sheet corresponds to the current state of our knowledge and is intended to provide information on our products and their potential applications. It is not therefore sufficient to assure certain properties of the products or their suitability for a concrete intended use, and does not contain any complete instructions for use. It also does not represent any guarantee of condition and durability and the user is not exempted from testing the suitability and potential applications for the intended purpose. Any extant intellectual property rights must be taken into account. The Environment and Quality Management of ASK Chemicals Metallurgy GmbH is certified and fulfills the requirements of ISO 14001 and ISO 9001. This information sheet shall cease to be valid if a new version is issued.

Technical properties & economic benefits:

- Preconditioning of molten metal
- Improves the nucleation distribution in molten metal
- Reduction of oxygen and sulfur content

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