**Inoculation Alloys** 

### **Application**

Due to the matched concentrations of Zr, Ca and Al, the inoculant Optinoc<sup>®</sup> Z is suitable for use in the production of cast iron with lamellar graphite as well as cast iron with nodular graphite. The combination of these elements, provide a strong inoculation effect in castings with thin sections.

#### Reference analysis

% Si	73 - 78
% Zr	1.2 - 2.0
% Ca	1.5 - 3.5
% Al	1.2 - 2.0
% Fe	residual

#### **Addition rate**

Addition rate for cast iron with lamellar graphite should be approx. 0.1 to 0.2% by weight. Addition rate for cast iron with nodular graphite should be approx. 0.2 to 0.4% by weight.

#### Sizing

0.2 - 0.7 mm\* (In stream inoculation) 0.7 - 2 mm (Ladle inoculation) 2 - 6 mm (Ladle inoculation)

\* In this grain size the Si content is somewhat below the value indicated above.

#### **Packaging**

- 25 kg paper sacks on pallet
- 1000 kg super sack on pallet

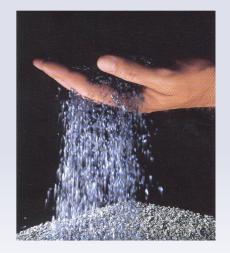
The containers are covered with a protective film.

#### Shelf life and transport

Optinoc $^{\$}$  Z 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. Optinoc $^{\$}$  Z is not a hazardous substance as defined by transport regulations.

## Technical properties & economic benefits:

- Long-lasting inoculation effect
- Eliminates carbides
- Low addition rates
- Uniform graphite precipitation
- Improved mechanical properties



# **Product Management Metallurgy**

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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.



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