

# VP 316

## Inoculation Alloys

### Application

VP 316 is a ladle and in stream inoculant that is especially suitable for the inoculation of cast iron with lamellar graphite, thanks to the combination of the inoculation-effective elements manganese, aluminum and calcium. VP 316 exhibits good dissolution behavior even at low temperatures. An addition of 0.15 – 0.25% leads to an increased number of eutectic cells and hence a significantly higher tensile strength. The tendency for carbide formation is also notably suppressed, especially in thin sections. The interaction of the elements also results in a finely stratified pearlite structure and ferrite-free matrix.

### Reference analysis

% Si	67 - 73
% Mn	3 - 4
% Al	1.5 – 2.0
% Ca	0.3 – 1.4
% Fe	residual

### Addition rate

When using as ladle inoculant: approx. 0.15 – 0.25% by weight.  
When using as an in stream inoculant: approx. 0.10 – 0.20% by weight.

### Sizing

0.124/0.2 - 0.7 mm\* (In stream inoculation)  
0.6 - 3 mm (Ladle inoculation)

\* In this grain size the Si content is somewhat below the value indicated above.  
Additional sizes available on request.

### Packaging

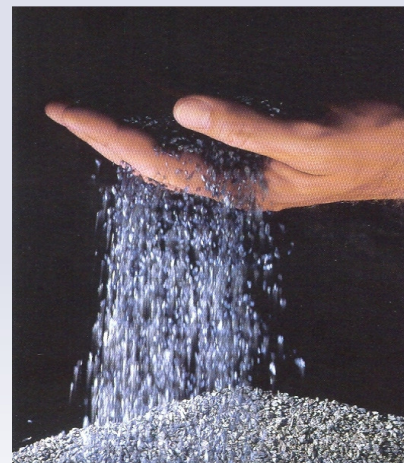
- 25 kg paper sacks on pallet
  - 100 kg steel drum on pallet
  - 1000 kg super sack on pallet
- The containers are covered with a protective film.

### Shelf life and transport

VP 316 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. VP 316 is not a hazardous substance as defined by transport regulations.

### Technical properties & economic benefits:

- Specially suitable for GJL
- Good dissolution behavior
- High effectiveness
- Low consumption
- Increased number of eutectic cells
- Avoidance of carbides
- Improved mechanical properties



### Product Management Metallurgy

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Status October 2010