

SAW 304

Inoculation Alloys

Application

SAW 304 is a highly effective inoculation alloy based on ferrosilicon and is especially suitable for cast iron with nodular graphite. The combination of Al and Bi greatly increases the number of spheres, in conjunction with Ce. The content of rare earth metals is precisely coordinated to the composition in order to counteract graphite degeneration. The diffusion paths for carbon are reduced by increasing the number of spheres, which allows increased ferrite contents to be achieved in the cast state.

Reference analysis

% Si	70 – 75
% Al	3.5 – 4.5
% Ca	< 1.5
% Bi	0.5 – 0.8
% SE	0.5 – 0.8
% Fe	Residual

Addition rate

Corresponding to the relevant conditions, i.e. base iron, inoculation method, cast parts to be cast, etc., the following added amounts

- Cast steel inoculation approx. 0.05 – 0.1%
- Ladle inoculation approx. 0.2 – 0.3%

are recommended.

Sizing

0.124 – 0.7 mm*	(In stream inoculation)
0.2 – 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
- 100 kg steel drum on pallet
- 1000 kg big-bags on pallet

The containers are covered with a protective film.

Shelf life and transport

SAW 304 should be used promptly following delivery. Storage should not exceed 3 months. The effects of humidity are to be avoided. Relevant hazardous substance regulations must be complied with. Our Shipment Handling department can provide further information. SAW 304 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 DIN EN ISO 9001, 14001, 50001 and OHRIS. This information sheet shall cease to be valid if a new version is issued.

Technical properties & economic benefits:

- Specially for GJS inoculation
- High inoculation effect
- Low consumption
- Significant increase in the number of spheres
- Highly ferritizing
- Improves the mechanical properties



Product Management Metallurgy

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