

Description : SILITON is a refining agent for metal casting processes. It is a homogeneous mixture of ceramic components of a precisely defined granulometric composition designed for direct application. The agent increases the purity of the molten metal intended for high-quality castings of grey cast iron and nodular cast iron. Its action consists in increasing the rate of the buoying up of slag-type non-metallic intrusions and oxidic slivers. The agent liquidifies the slag-type intrusions thus increasing the rate of their buoying up bringing up other types of intrusions from the metal along the way. It also helps to keep the ladles in a clean state.

Use : The optimum dispensed amount varies between 0.1 – 0.3 % relative to the weight of the molten metal and depends on the level of metal impurity. To achieve the optimum effect the agent should be applied when the metal is in a state of turbulence. The most suitable method is an application while metals are being poured into ladles or when the metal is reladled into the casting ladle. An application at the end of melting in an induction crucible furnace when, during the maximum performance, the metal is whirling and mixing is also suitable. After application the slag, which is quite fluid, must be carefully skimmed. It is recommended that a slag coagulant is used to simplify its removal. A suitable coagulant is the **SILIKAT** slag-forming coagulant produced by MKZ a.s. When handling the admixture it is essential that eye and breathing protection equipment is used against dust.

Properties :

<i>Property</i>	<i>Normal value</i>	<i>Testing procedure</i>
Chemical analysis		ČSN EN 955-2
Fe ₂ O ₃ content	3 %	
CaO content	20 %	
Na ₂ O content	23 %	
MgO content	4 %	
Bulk density	1000 kg/m ³	ČSN EN 1097-3
Grain size	0 – 1 mm	ENV 1402-3
Moisture content	1 %	ČSN P ENV 1402-3

Packaging : The Siliton refining agent is supplied in multiple-layer paper bags in batches of 50 kg.

Storing : The refining agent should be stored in enclosed and dry warehouses where its shelf life is unlimited.

Ing. Milan Čvanda
Managing Director and Chairman of the Board