

The proven pre-melted calcium aluminates for ladle metallurgy

Lafarge LDSF

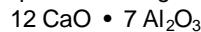
Applications

- LAFARGE LDSF is a completely pre-melted material manufactured to meet the specific requirements of steel makers and metallurgists.
- Ladle metallurgy and ladle furnaces are a critical quality control step between the primary melting furnace and the continuous caster.
- A key feature for successful ladle metallurgy is slag control. LAFARGE LDSF is specifically designed to have the required chemical composition and physical properties that make it easy to store and handle.
- LAFARGE LDSF is not a by-product, but is a manufactured calcium aluminate of controlled composition. It is produced in high-capacity furnaces by the complete fusion of bauxite and limestone, which yields a homogeneous product of constant composition.
- LAFARGE LDSF is hard, stable, and nearly dust-free.
- LAFARGE LDSF melts readily at “steel-making” temperatures. The slag has good sulphur retention and performs effectively as a desulphurising slag.
- LAFARGE LDSF calcium aluminate contains no fluorine compounds, thus avoiding refractory attack and atmospheric pollution.
- LAFARGE LDSF is an excellent cover slag for the prevention of gaseous pick-up from the atmosphere and is an effective fluid sink that absorbs inclusions from steel.

General characteristics

1 Mineralogical composition

Principal mineralogical phase:



2 Chemical composition

Main constituents (%)	
CaO	Al ₂ O ₃
49 – 54	41 – 45

Minor constituents (%)	
SiO ₂	Fe ₂ O ₃
< 3.7	< 1.8

3 Physical properties

- Low melting point <1385°C (2525°F)
- Bulk density 1.3 – 1.7 g/cm³ (81.2 – 106.1 lb/ft³) dependent on the sizing
- Specific gravity 3.0 g/cm³

LDSF advantage for steel-making processes

- Consistent chemistry
- Superior refractory protection
- Readily available
- Sized and packaged to customer specification
- Precisely manufactured product not “by-product”

The above listed properties typically represent the product manufactured by LCA. For warranty information and current product specifications per our ISO 9001 manufacturing environment, please contact an LCA technical manager for a copy of the current *Specification Sheet*.