

Iron Sand



IRON SAND is a glassy iron silicate aggregate consisting of granulated slag, extracted as a by-product from Boliden Rönskär's copper production.

The Iron Sand has good insulating and draining properties, making it suitable as a ballast material for road and construction. The high density and angular particle shape also makes the iron sand effective as a blasting abrasive and heavy aggregate in high density concrete. Iron sand have been used as a ballast in the Skellefteå area and for abrasives in Europe since the 1970s. Use according to Boliden's user instructions.

Boliden's Iron Sand is REACH compliant, registered under 01-2119513228-45-0005 and produced and CE-certified according to SS-EN 13242 + A1:2007 System 2+

OUR PROMISE

Boliden's experienced technical support drives the development and production process and our technical consultant is ready to answer your questions with regards to your individual application of the product.

Through reliable deliveries, high quality products and professional customer service, including price information and technical support we want to be your supplier of choice.

By becoming Boliden's customer, we want to help you add value to your customers and work with you for a more sustainable future.



Did you know that ...

Aggregates are the most mined materials in the world! Boliden's Iron Sand offers an alternative that enable re-use of an existing material, thereby conserving natural resources - moving towards a circular economy.

Technical Specification

Colour: Black/grey
Hardness: HVO.2 610 (6 Moh)
Particle Density: 3.45-3.65 mt/m³ (215-225 lbs/cu-ft)
Bulk Density, min: 1.6-1.8 mt/m³ (100-112 lbs/cu-ft)
Bulk Density, max: 2.15-2.30 mt/m³ (135-154 lbs/cu-ft)
Particle shape: Angular

Thanks to the exceptional fuming furnace at the Rönnskär Smelter, Boliden can produce its unique Iron Sand with a Pb-content 10-15 times lower than the majority of Iron Silicates available on the market today. It makes it possible for Boliden to offer a REACH-compliant product – This sets a new world standard for Iron Silicates.



System of Conformity

Iron Sand: SS-EN 13242 + A1:2007 System 2+
REACH: 01-2119513228-45-0005
EC # 266-968-3
CAS # 67711-92-6

Learn more about Boliden's initiatives for sustainable metal production at: boliden.com

Chemical analysis	% by weight
FeO	42 - 45
SiO ₂	33 - 42
Al ₂ O ₃	2 - 7
CaO	2 - 6
MgO	0.5 - 3
Zn	0.8 - 1.5
S	0.5 - 0.7
Cu	0.5 - 0.9
Mn	0.4 - 0.6
Cr	0.2 - 0.4

Grain size distribution*			
Passed amount, weight %			
Sieve (mm)	Upper limit	Average	Lower limit
0.063	3	2	0.1
0.125	4	2	0.5
0.25	10	5	1
0.5	25	20	10
1	75	70	55
2	99	98	91
4	100	100	98
5.6	100	100	99

* according to SS-EN 933-1

The chemical and physical data in this technical data sheet are expected average figures. Oxides are not indications of the phases present, but only conventional representations of elements.

May contain small amounts of agglomerated material of fine fraction to larger lumps than stated above.

The Boliden Group

Metals are an ever-present and vital component of society. Boliden extracts minerals and produces high quality metals in a cost-efficient way. The work – from exploration to customer delivery – is characterised by care for people, the environment and society.

The Boliden Group operates four mines and five smelters in Sweden, Finland, Norway and Ireland and has a total of approximately 6,000 employees. Our core expertise is in exploration, mining, smelting and recycling.

Boliden's main metals are zinc and copper, but the production of lead, gold, silver and other products is also of considerable importance for our profitability. The annual turnover is approximately SEK 50 billion.



Our value chain

Exploration Successful exploration is vital to long-term metal production. The exploration is conducted in the vicinity of existing mines and in new areas in order to find new deposits.

Mines Zinc-, copper-, nickel-, lead-, gold- and silver-bearing ores are mined in Boliden's mining areas. The ore is processed to metal concentrate, the majority of which is delivered to smelters within the Group.

Smelters Boliden's smelters refine metal concentrates and other raw materials, such as electronic scrap, to produce both pure metals and customised alloys.

Customers Our products are mainly sold to industrial customers in Europe. Most of the zinc is sold to steel companies, while the copper is supplied to manufacturers of for example wire rod.