

Technical Data Sheet

Insulating Aggregate

General Description:

Insulating aggregates are light weight refractory products with low thermal conductivity. Dirgodaz Amol Industries Co, manufactures different type of high purity insulating aggregates (SD-IA series) in the base of alumino silicate compositions with low iron content.

These products are characterized by following properties:

Higher thermal stability to other lightweight materials such as vermiculite, perlite and some ceramic fibers, low thermal conductivity, good strength, high purity, low iron oxide content, good resistance in chemical corrosive and reducing atmospheres(carbon monoxide and etc.), and safety in use.

Typical Applications:

- . as raw material in monolithic refractories such as insulating castables
- . as loose filler material in insulation blocks and kiln cars
- . as covering material in ferrous & non-ferrous foundries

Technical Specification:

These products offer in different technical specifications according on alumina content and density, and available in different particle size distributions of 0-1, 1-3, 3-5 and 5-8 mm. Also new products can be developed to achieve the specific customer technical specification and design requirements for some types of industrial applications.

The following data represents typical average values of quality properties for different products, which also are subject to normal tolerances.

Property	unit	SD-IA 401	SD-IA 402	SD-IA 601	SD-IA 602
Classification temperature	°c	1400	1400	1550	1550
Packing Density (coarse/fine grain)	g/cm ³	0.55/ 0.70	0.90/1.10	0.65/0.80	0.90/1.10
Linear shrinkage	%	≤ 1	≤ 1	≤ 1.5	≤ 1.5
	condition	1350°c 24h	1350°c 24h	1500°c 24h	1500°c 24h
Chemical analysis (%)	Al ₂ O ₃	≥40	≥40	≥60	≥60
	SiO ₂	≤55	≤55	≤36	≤36
	Fe ₂ O ₃	≤1	≤1	≤1	≤1
Available particle size (mm)		0-1, 1-3, 3-5, 5-8			