

Technical Data Sheet

Insulating monolithic refractories

General Description:

Insulation monolithic refractories are light weight refractory products with low thermal conductivity. These products widely used as thermal preservation layer such as hot face insulation lining, or back-up insulation lining in various high temperature industrial units which keep heat energy, reduce the fuel consumption and weight of the lining

Dirgodaz Amol Industries Co, manufactures different castable and gunning type of insulation monolithic refractories for maximum service temperature up to 1500°C. These hydraulic setting products including of medium weight, light weight and very light weight mix, which also are provided by different alumina content, iron oxide content and thermal conduction values.

Thermal insulating castables are formulated with different types of lightweight aggregates such as perlite and sintered aggregates lightweight sintered aggregate with high alumina and low iron oxide content, are used in the manufacturing of high purity insulating castables, which have high chemical corrosion resistance in reduction atmospheres (carbon monoxide, hydrogen).

Advantages & Characteristics:

Good mechanical strength, erosion resistance, chemical corrosion resistance, rheological behavior, great uniformity and easy to installation.

Typical Applications:

- ☒ chemical & petrochemical (olefin, methanol)
- ☒ ferrous metals (iron ore pelletizing, iron ore direct reduction, steel, cast iron)
- ☒ non-ferrous metals (aluminum, copper)
- ☒ ceramic (tile, porcelain, glass, cement)

Property	S.T	B.D (g/cm ³)	C.C.S (kg/cm ²)		P.L.C (%)	T.C (W/m.k)		Chemical Analysis (%)			
Code	(°C)	110°C	110°C	1000°C	1000°C	600°C	1000°C	Al ₂ O ₃	CaO	Fe ₂ O ₃	SiO ₂
SD-IC11/1	1100	0.70	15	12	1.5	0.16	0.20	30	20	2	43
SD-IC11/2	1100	0.88	25	15	1	0.22	0.26	30	16	1.5	47
SD-IC11/3	1100	0.88	25	17	1.2	0.25	0.29	30	16	8	41
SD-IC12/1	1250	1.04	35	25	1	0.24	0.28	40	16	1.5	37
SD-IC12/2	1250	1.2	50	30	0.7	0.30	0.35	40	16	1.5	37
SD-IC13	1350	1.44	70	40	0.5	0.40	0.45	45	12	1.5	38
SD-IC14	1450	1.52	80	50	0.5	0.45	0.51	50	8	1.5	37
SD-IC15/1	1550	1.52	80	50	0.4	0.50	0.55	60	7	1	30
SD-IC15/2	1550	1.7	150	100	0.3	0.54	0.61	60	7	1	30