

ALU-13B — Product data sheet

Presentation:

The ALU-13B insulating brick complies with the specifications for aluminium pots applications. Also called BIR, it offers both high insulating and mechanical properties. As it might come in contact with aluminium or fluorinated sodium, its resistance to corrosion is good.



Maximum classified temperature: 1350°.



French refractory clays & local organic filler.



| Properties : | | Standards | Units | Average µ | Limits | |
|---|----------|-----------|-------|-----------|----------|-----------|
| | | | | | TI (low) | Th (high) |
| Classification | | ISO 2245 | | 135 | | |
| | | ASTM C155 | | | | |
| Bulk density | | EN 1094-4 | g/cm3 | 1,08 | 1 | |
| Cold Crushing Strength (// to extrusion) | | ISO 8895 | Мра | 9,5 | 8 | |
| Permanent Linear Change (12h at 1350°C) | | ISO 2477 | % | -0,5 | -1 | |
| Chemical | | 100 40077 | 0/ | | | |
| Analysis: | | ISO 12677 | % | | | |
| (XRF) | Al2O3 | | | 38 | 35 | |
| | SiO2 | | | 57 | | |
| | Fe2O3 | | | 1,4 | | 1,6 |
| | TiO2 | | | 1 | | |
| | CaO+MgO | | | 0,5 | | |
| | Na2O+K2O | | | 1,5 | | 1,7 |
| Thermal Conductivity: | | ASTM C182 | W/m.K | | | |
| (through 114mm dimension) | 200°C | | | 0,34 | | |
| | 400°C | | | 0,37 | | |
| | 600°C | | | 0,40 | | |
| | 800°C | | | 0,43 | | |
| | 1000°C | | | 0,46 | | |
| | 1200°C | | | 0,48 | | |
| Reversible Thermal Expansion : (20°C to 1000°C) | | ISO 16835 | % | 0,5 | | |
| Pyroscopic Cone Equivalent : | | ISO 528 | °C | 1700 | | |

| Dimensional tolerances: | Standard Pieces | Non-Standard Pieces | |
|-------------------------|-----------------|-----------------------|--|
| Length | ±1.0mm | | |
| Width | ±1.0mm | According to accepted | |
| Thickness | ±1.0mm | drawings | |
| Squaring | 1mm / 100mm | | |

| Other Information : | C 1400 S or H | RL 13 S or H |
|---------------------|------------------|------------------|
| Recommended mortar | C : Heat set | RL : Air set |
| | S : Dry / Powder | H : Ready to Use |

Ref. 2023/02

Physical properties are based on averages of routine quality controls carried out on standard bricks. Averages and standard deviations are indicative values, limits (Tl and Th) are guaranteed values.

