

DURAGRIT®

Crystal Blade Ceramic Abrasive

DURAGRIT® is a non-bauxite Alumina grade glass ceramic grit developed by a Malaysian R&D company. **DURAGRIT®** is a genuine eco-friendly ceramic material which can be used for abrasive blasting.

DURAGRIT® Ceramic has been fired through between 1230-1400 degrees Celsius high temperature. This makes it a very hard (Mohs 6-7.5) and sharp material. It contains billions of hard and sharp micro ceramic materials crystals which break off and expose new sharp edges when it hits a surface during abrasive blasting process. These freshly rejuvenated cutting edges allow for consistent aggressive surface profiling during blasting process. And it also helps to extend its re-usable cycle up to 2 times, making it a very economical and durable abrasive material suitable for most industrial blasting jobs. This is an excellent multi-purpose abrasive material which can be used as a replacement of many traditional abrasive materials.

Characteristics of DURAGRIT® Abrasive

- 100% salt free
- Resistant to chemicals & corrosion
- Extremely low water absorption
- Uniform material density
- Hard and sharp crystal
- Eco-friendly material
- Non-reactive with aluminium and alloys
- Can be used on stainless steel surface

Main Applications

- Tool Cleaning / Blasting Works
- Abrasive Material



ANALYSIS & PHYSICAL PROPERTIES

Description	Test Method	Results
Determination of apparent density (kg/m ³)	ISO 11127-3	2.5 x 10 ³
Assessment of hardness by a glass slide test, Mohs scale	ISO 11127-4	6 above
Determination of moisture, % (m/m)	ISO 11127-5	0.1
Determination of water-soluble contamination by conductivity at 20° C, mS/m	ISO 11127-6	7.39
Determination of water-soluble chloride, % (m/m)	ISO 11127-7	Nil
Determination of crystalline phase	X-Ray Diffractometer (XRD)	1. Aluminium Oxide 2. Calcium Silicate 3. Quartz 4. Sodium Silicate
Determination of free silica (%)	-	< 1.0
Determination of chemical composition (%)	X-Ray Fluorescence Spectrometer (XRF)	
1) SiO ₂		69.5
2) Al ₂ O ₃		7.22
3) Na ₂ O		9.70
4) CaO		12.0
5) TiO ₂		0.18
6) K ₂ O		0.58
7) Fe ₂ O ₃		0.27
8) Cr ₂ O ₃		0.31
9) ZrO ₂		0.13
10) ZnO		0.04
11) S		0.08

PHYSICAL CHARACTERISTICS

Bulk Density (kg/m ³)	2.5 x 10cu
Specific Gravity	2.2 - 2.4
Tensile Strength (psi)	1500 - 2500
Compressive Strength (psi)	25000 - 50000
Flexural Strength (psi)	3500 - 6000
Hardness (Mohs)	6 above