

Yttrium-Aluminium-Garnet – YAG

Characteristics

- Fused Yttrium -Aluminum- Garnet $Y_3Al_5O_{12}$.
- Melting point: 1.942°C (3.542°F).
- Molecular weight: 593.62 g/mol.
- Appearance: white to light grey powder.

Application

- Sintering aid for non-oxide ceramics (SiC, SiN, SiAlON's, AlN,...).
- Spray powder.
- Coating ingot.

Chemical Analysis

Y_2O_3	Al_2O_3
57.1±0.5 [%]	42.9±0.5 [%]

Purity

Fe	<500 ppm	Ti	<100 ppm
Si	<250 ppm	C	0.1 %

Particle Size Parameters

Fused	Fused	Fused
-325 mesh	-200 mesh	125-250 μ m

PSD can be manufactured on customers request.

All particle size analysis with Microtrac.

Physical Parameters

Surface Area (BET)	< 3.0 m^2/g	
Apparent Density	min 5.0 g/cm^3	
XRD (phase analysis)	Available	On Request
LOI	<1 Wt[%]	



Packing

- 20 kg, 25 kg and 50 kg in pails
- 1000 kg and 500 kg in sacks

Maximum Lot Size

- 1.500 kg

Inspection certificate according to
EN 10204 3.1

Material manufactured in accordance
with ISO 9001