

ALPHA-SILICON NITRIDE GRADE B 7

Chemical Formula	$\alpha\text{-Si}_3\text{N}_4$
Chemical Name	Silicon Nitride
Description of Product	Alpha phase- Si_3N_4
HS Number	28500030
Grades Available	Product Designation Si_3N_4 Grade B 7

Chemical Characteristics

(Mass fraction in % [cg/g]; ppm [$\mu\text{g/g}$])

Grade B 7

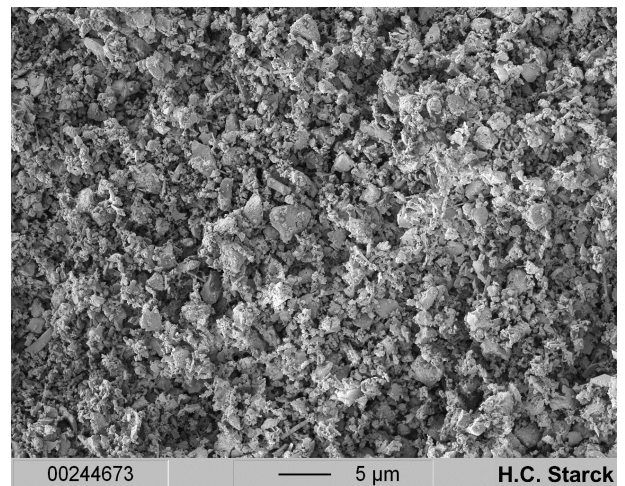
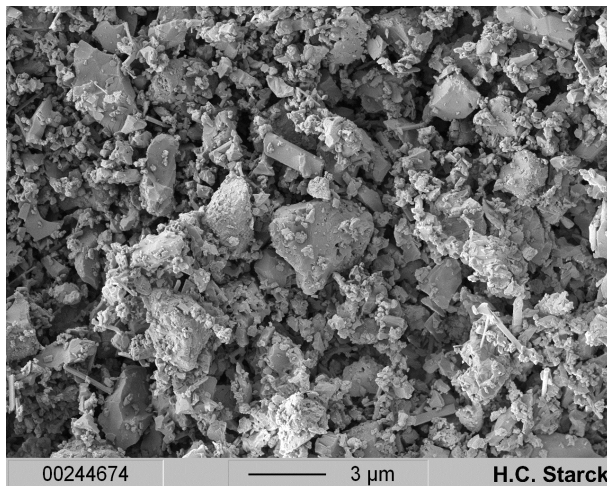
N	min. 38.0	%
C	max. 0.2	%
O	max. 1.5	%
Al	max. 0.08	%
Ca	max. 0.02	%
Fe	max. 0.06	%

Physical Characteristics

$\alpha\text{-Si}_3\text{N}_4$	min. 87.0	%
Si _{free}	max. 0.9	%
Specific Surface Area ¹⁾	min. 4.0	m ² /g
Particle Size Distribution ²⁾		
D 90 %	2.0 - 4.0	μm
D 50 %	0.9 - 1.3	μm
D 10 %	0.2 - 0.4	μm

1) TriStar 3-point by BET per ASTM D 3663, 2) MASTERSIZER by Laser Light Diffraction per ASTM B 822, deglomeration with high energy ultrasonic before analysis.

SEM Photomicrograph³⁾
scale see photograph,
 α -Si₃N₄ Grade B 7



Packaging

25 kg steel drums with polyethylene inlet. (60 Liter) 8 drums on one pallet CP1 (1000x1200 mm) = 1 Packaging-unit of 200 kg. Other packaging/quantity on request.

Lot Size

Höganäs silicon nitride powders are available in homogeneous lots up to 5 tons.

Sintering Aid

As a typical sintering aid for Si₃N₄-powders we recommend our Y₂O₃-powders Grade B and C.

Storage and Handling

Storage and handling are subject to the rules and regulations in the country of use. Store in a closed container.

Hazards identification in Advertising (REGULATION (EC) No 1272/2008)

None.

Documentation

An inspection document in accordance with EN 10204 is supplied with every shipment.

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