ALUMINUM NITRIDE GRADE AT, GRADE BT

Chemical Formula  AIN
Chemical Name   Aluminum Nitride
Description of Product
Grade AT: Agglomerated Powder, broad particle size distribution
Grade BT: Fine particle size, deagglomerated
HS Number  28500020
Grades Available
Aluminum Nitride Grade AT
Aluminum Nitride Grade BT

Chemical Characteristics
(Mass fraction in % [cg/g]; ppm [µg/g])

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<thead>
<tr>
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<th>Grade AT</th>
<th>Grade BT</th>
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<tbody>
<tr>
<td>N</td>
<td>min. 32.0 %</td>
<td>min. 32.0 %</td>
</tr>
<tr>
<td>C</td>
<td>max. 0.15 %</td>
<td>max. 0.15 %</td>
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<tr>
<td>O</td>
<td>max. 1.3 %</td>
<td>max. 1.5 %</td>
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<tr>
<td>Fe</td>
<td>max. 0.05 %</td>
<td>max. 0.05 %</td>
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Crystallographic Phases
Crystal Structure
Hexagonal
Single Phase
Hexagonal
Single Phase

Physical Characteristics
Specific Surface Area
≤ 2.0 m²/g
1.8 - 3.8 m²/g
Particle Size Distribution
D 10 %
0.4 - 1.4 µm
0.2 - 0.6 µm
D 50 %
7 - 11 µm
1 - 3 µm
D 90 %
17 - 32 µm
5 - 10 µm

1) TriStar by BET per ASTM D 3663, 2) MICROTRAC by Laser Light Diffraction per ASTM C 1070.
SEM picture
AlN Grade AT

SEM picture
AlN Grade BT

3) Secondary Electron Image (SEI)
Packaging
50 kg in steel drums with polyethylene inlet (60 l).
9 drums on one pallet CP 3 (1140 x 1140 mm) = 1 packaging unit of 450 kg.
Other packaging unit/quantity on request.

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 Article 48)
Specific target organ toxicity – repeated exposure Category 1
Chronic aquatic toxicity Category 1.

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