

## Technical Data Sheet



Description: **Silzot® SQ** is a fine powder derived from the direct chemical reaction of highly purified silicon and nitrogen.

CAS-no: 12033-89-5

Chemical Name / Formula: Silicon Nitride /  $\text{Si}_3\text{N}_4$

Specification:	Specified	Typical Value
N	$\geq 38,5$ %	$> 38,8$ %
O	$\leq 1,0$ %	$< 0,5$ %
C	$\leq 0,25$ %	$< 0,16$ %
Fe	$\leq 10$ ppm	$< 6$ ppm
Ca	$\leq 10$ ppm	$< 8$ ppm
Cr	$\leq 3$ ppm	$< 1$ ppm
Ni	$\leq 3$ ppm	$< 0,5$ ppm
Ti	$\leq 3$ ppm	$< 0,5$ ppm
Cu	$\leq 3$ ppm	$< 0,5$ ppm

Characteristics:	
$\text{Si}_{\text{free}}$	$< 0,2$ %
Al	$< 1$ ppm
W	$< 1$ ppm
Mg	$< 0,5$ ppm
K	$< 0,5$ ppm
Mn	$< 0,5$ ppm
V	$< 0,1$ ppm
Co	$< 0,1$ ppm

Particle Size:	powder	$d_{98} \leq 10$ $\mu\text{m}$	$d_{98} < 7$ $\mu\text{m}$
			$d_{90} < 5$ $\mu\text{m}$
		$d_{50} \leq 2,5$ $\mu\text{m}$	$d_{50} < 2,2$ $\mu\text{m}$

*(Sympatec HELOS dry analysis)*

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**Edition: January 2018 (This data sheet supersedes all previous data sheets for this product.)**

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Packaging:	Standard packing in 120 L steel drums with inner PE bag, containing 50 kg.
Storage Condition:	Silzot® SQ should be kept in a dry place and in closed original container. The shelf life of Silzot® SQ at room temperature is min. 24 months in the original unopened container, under the storage conditions as suggested in the MSDS.

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