

# Zirconium Metal powder, Grade A1



**PRODUCT** Zirconium Metal powder, Grade A1, aqueous suspension  
 SPZF Type Product No. 11006  
 CAS No. 7440-67-7 EINECS-No. 231-176-9

**APPEARANCE** Greyish-black powder  
**FORMULA** Zr

**APPLICATION** High energy igniters, Fuses and thermal batteries in pyrotechnics, production of highly reactive fuses, delay composition, and igniter composition in pyrotechnics for use in ammunition, explosive, airbags and belt pretentioners, getter materials zirconium component in powder metallurgy, as a source material of getter film for manufacturing transmitter.

## SPECIFICATION

Zr <sub>total</sub> + Hf <sub>total</sub>	min. 95%
Hf	approx. 2%
Ignition gain	min. 28.5%
Surface area (BET)	1.4 +/- 0.4 m <sup>2</sup> /g
Burning rate	13.0 +/- 6.0 s/50cm
Auto Ignition temperature	220 +/- 40 °C
Fe	max. 0.1%
Al	max. 0.1%
Ca	max. 0.1%
H	max. 0.2%
Particle size (by sieving)	min. 99.9 % < 45µm
Average particle size (Blaine)	1.5 ± 0.4 µm
Average particle size (Malvern)	2.4 ± 0.4 µm