

TECHNICAL DATA SHEET

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Zirconium Nickel alloy 70/30 A

Product number 10000390, 10001979, 10001980

APPLICATION

Zirconium/Nickel alloy powders find application in various pyrotechnic and ordnance areas. They are used in squibs, delay mixtures and initiators.

SPECIFICATION

Auto Ignition Temperature	> 225 °C
Combustion Rate	200 +/- 75 sec/50 cm
Particle Size	min. 99.9 % < 45 µm
Average Particle Size	4 +/- 2 µm
Zr + Hf content	70 +/- 3 %
Ni content	30 +/- 3 %
(Zr + Hf) + Ni content	> 97 %
Fe	max. 0.20 %
Ca	max. 0.15 %
Al	max. 0.15 %
S	max. 0.04 %
Moisture	max. 0.2 %

MIL-Specification Zirconium/Nickel alloy powder 70/30, type A is manufactured to meet the US government specification MIL-Z-11410, Type I. Exceptions: Type A is not dichromated; Sulphur content is 0.04% instead of 0.01%. The Product is analyzed according to Albemarle Test Procedures.

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METHOD OF ANALYSIS

Gravimetric determination of zirconium and nickel. Spectral analysis of accompanying impurities. Measurement of average particle size and combustion properties.

PHYSICAL PROPERTIES

HANDLING & STORAGE

Handling	Highly flammable solid. Dust explosion hazard. Powders of these alloys are highly flammable and burn with intense heat. By appropriate mixing of types A and B which are comparable in their composition but quite different in regard to their combustion properties it is possible to adjust defined combustion rates. Mixtures are available upon request. Keep away from flames, sparks and heat sources. Use ground connected metallic apparatus to avoid sudden ignition by electrostatic discharge. In case of fire cover with dry sand or dry chemical/dolomite (powdered limestone). Never extinguish with water, carbon dioxide, or halocarbon. See our safety data sheet and special precautionary advice for more information on safety.
Storage	Store in tightly closed containers.

TRANSPORT & PACKAGING

OTHER INFORMATION

Further Related Documents Safety Data Sheet

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