Rockwood Lithium

Zirconium Nickel alloy 70/30 C

PRODUCT

Zirconium Nickel alloy 70/30 C

Product No. 453441

FURTHER INGREDIENTS

Zirconium powder
CAS-No. 7440-67-7 EINECS-No. 231-176-9

Nickel
CAS-No. 7440-02-0 EINECS-No. 231-111-4

APPLICATION

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

APPEARANCE

Powder, greyish black

FORMULA

ZrNi

PHYSICAL PROPERTIES

Bulk Density:	2 - 3 g/ccm
Melting Point:	1,140 - 1,650 °C

SPECIFICATION

Combustion Rate:	1,400 +/- 500 sec/50 cm
Particle Size	min. 99.9 % < 45 µm
Average Particle Size	4 +/- 2 µm
Zr + Hf content	70 +/- 4 %
Ni content	30 +/- 4%
(Zr + Hf) + Ni content	> 96 %
Fe	max. 0.20 %
Ca	max. 0.15 %
Al	max. 0.15 %
S	max. 0.01 %
Cr	max. 0.50 %
Moisture	max. 0.2 %

MIL-Specification

Zirconium/Nickel alloy powder 70/30, type C is manufactured to meet the US government specification MIL-Z-11410B, Type I.

Europe:
Rockwood Lithium GmbH
Fax: +49 69 40126-72000

Americas:
Rockwood Lithium Inc.
Fax: +1 704 734-2718

Asia:
Rockwood Lithium Japan K.K.
Fax: +81-3-6434-5623

METHOD OF ANALYSIS

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

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 material safety data sheet and special precautionary advice for more information on safety.

STORAGE

Store in tightly closed containers.

TRANSPORT REGULATIONS

UN-No.:	3089		
Rail/Road (RID/ADR):	Class 4.1	PG II	Label 4.1
Sea (IMDG-Code):	Class 4.1	PG II	Label 4.1
Air (IATA-DGR):	Class 4.1	PG II	PAX 445
			CAO 448

GHS HAZARD PICTOGRAMS

H&P phrases: See Material Safety Data Sheet

SIGNAL WORD

Danger

PACKING

Passenger aircraft: tin cans of 2.5 kg.

Cargo aircraft only: tin cans of 5 kg.

Other packaging sizes on request.

Europe:
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