

Survey Zirconium Products (1 of 2)

Metal Powder Grade	Gain on Ignition [%]	Zr (+Hf) [%]	Hydrogen Content [%]	Auto Ignition Temperature [°C]	Combustion Rate [sec/50cm]	Particle Size [µm]	Average Particle Size [µm]
Zr CA) ¹	31.5 ± 1.0	97.4 ± 0.8	max. 0.2	180 ± 20	13 ± 5	99.9% < 45	2.0 ± 0.3
Zr CX	31.7 ± 1.2	97.5 ± 0.9	max. 0.2	180 ± 30	9 ± 5	99.9% < 45	1.7 ± 0.5
Zr FA	28.6 ± 1.9	95.2 ± 1.4	0.3 ± 0.05	200 ± 30	65 ± 20	99.9% < 45	2.3 ± 0.5
Zr MX) ²	31.5 ± 1.2	97.4 ± 0.9	max. 0.2	180 ± 20	14 ± 6	99.9% < 45	2.2 ± 0.5
Zr ZM) ³	31.4 ± 1.2	97.3 ± 0.9	max. 0.2	190 ± 30	20 ± 10	99.9% < 45	2.5 ± 0.5
Zr AB	min. 28.4	min. 95.0	max. 0.2	235 ± 65	12.5 ± 7.5	99.9% < 45	1.9 ± 0.4
Zr GA	min. 33.5	min. 95.5	max. 0.25	240 ± 25	75 ± 15	99.9% < 45	5.2 ± 0.8
Zr GH	33.0 ± 0.7	98.5 ± 0.5	0.8 ± 0.2	270 ± 40	460 ± 75	99.9% < 45	5.5 ± 1.0
Zr ZE	min. 33.4	min. 98.8	max. 0.15	265 ± 40	23 ± 7	99.9% < 45	4.0 ± 1.0
Zr ZS	33.0 – 34.5	min. 98.5	max. 0.25	220 ± 30	35 ± 15	99.9% < 45	3.0 ± 0.5

)¹ On request Zr metal powder type CA is available to meet government specification MIL-Z-399D, type II, class 2

)² On request Zr metal powder type MX is available to meet government specification MIL-Z-399D, type II, class 1

)³ On request Zr metal powder type ZM is available to meet government specification MIL-Z-399D, type II, class 3+4

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Chemetall GmbH

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Survey Zirconium Products (2 of 2)

Product Grade	Gain on Ignition [%]	Zr (+Hf) [%]	Hydrogen Content [%]	Auto Ignition Temperature [°C]	Combustion Rate [sec/50cm]	Particle Size [µm]	Average Particle Size [µm]
Zirconium hydride C	31.5 ± 1.0	97.3 ± 0.8	min. 1.9	250 ± 30	330 ± 100	99.9% < 45	2.0 ± 0.5
Zirconium hydride F	29.5 ± 1.0	95.5 ± 1.0	1.6 ± 0.2	280 ± 20	320 ± 40	99.9% < 45	2.0 ± 0.5
Zirconium hydride G	31.8 ± 0.7	97.6 ± 0.5	min. 1.9	300 ± 50	1300 ± 600	99.9% < 45	5.5 ± 1.0
Zirconium hydride S) ¹	31.2 ± 1	97.2 ± 0.8	min. 1.9	290 ± 50	600 ± 150	99.9% < 45	2.6 ± 0.6
ZrNi-alloy 70/30 A	not provided	70 ± 3	not provided	> 225	200 ± 75	99.9% < 45	4 ± 2
ZrNi-alloy 70/30 B	not provided	70 ± 3	max. 1.5	> 225	1350 ± 250	99.9% < 45	4 ± 2
ZrNi-alloy 70/30 C) ²	not provided	70 ± 4	not provided	not provided	1400 ± 400	99.9% < 45	4 ± 2
ZrNi-alloy 30/70 A	not provided	30 ± 3	not provided	> 240	575 ± 200	99.9% < 45	5 ± 2
ZrNi-alloy 30/70 C) ³	not provided	30 ± 4	not provided	not provided	650 ± 200	99.9% < 45	5 ± 2

)¹ On request Zirconium hydride type S is available to meet government specification MIL-Z-21353

)² On request ZrNi-alloy type 70/30 C is available to meet government specification MIL-Z-11410, type I

)³ On request ZrNi-alloy type 30/70 C is available to meet government specification MIL-Z-11410, type II

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