

TUNGSTEN METAL POWDER (D-GRADE)

Description of Product WMP D (0.4 to approx. 2,5 µm –lab milled-): Soft, agglomerated tungsten metal powders mainly used as raw material for cemented carbides and unalloyed tungsten rods and wires. Due to the agglomerated condition, the powder has an excellent cold pressing behaviour and, in connection with additional components, improved mixing properties.

Grades Available **Product Designation**
WMP D

Chemical Characteristics¹⁾

(Mass fraction in % [cg/g]; ppm [µg/g])

	Range			
Al	max.	10	ppm	
Ca	max.	10	ppm	
Cr	max.	20	ppm	
Cu	max.	5	ppm	
Fe	max.	80	ppm	
Mo	max.	50	ppm	
Na	max.	20	ppm	
Ni	max.	20	ppm	
Si	max.	30	ppm	
The oxygen content depends on the particle size.	O max.	6000	ppm	for D 45
	O max.	4000	ppm	for D 60
	O max.	3000	ppm	for D 80
	O max.	2000	ppm	for D 100
	O max.	1500	ppm	for D 130 / D 160
	O max.	1000	ppm	for D 200 / D 250

Physical Characteristics

Fisher Number (lab milled)

D 45 ²⁾			max.	0.50 µm
D 60	min.	0.50 µm	max.	0.70 µm
D 80	min.	0.70 µm	max.	0.90 µm
D 100	min.	0.90 µm	max.	1.15 µm
D 130	min.	1.2 µm	max.	1.4 µm
D 160	min.	1.5 µm	max.	1.7 µm
D 200	min.	1.8 µm	max.	2.2 µm
D 250	min.	2.3 µm	max.	2.7 µm

1) Information on chemical analytical methods and list of analyzed items on request, 2) Surface area BET per ASTM D 3663 (WMP D 45: for information only).

Packaging 50 kg in 18 l steel drums with PE-bags
Packaging unit = 400 kg in 8 drums on CP1 pallet.

Other kinds of packaging are available on request.

Storage and Handling Storage and handling are subject to the rules and regulations in the country of use.

Hazards identification in Advertising (REGULATION (EC) No 1272/2008 Article 48)

WMP D 45, WMP D 60:

Flammable solids Category 1, Self-heating substances Category 2

WMP D 80:

Flammable solids Category 2, Self-heating substances Category 2

WMP D 100, WMP D 130, WMP D 160:

Flammable solids Category 2

WMP D 200, WMP D 250:

None

Documentation An inspection document in accordance with EN 10204 is supplied with every shipment.

H.C. Starck Tungsten GmbH
P.O. Box 34 14
38634 Goslar/Germany
Phone +49 5321 751-0, Fax +49 5321 751-56192