

## TUNGSTEN METAL POWDER (HC S-GRADE)

**Description of Product** WMP HC S (0.7 to 2.5  $\mu\text{m}$ ): In comparison with the H.C. Starck HC grades this product line shows a very narrow grain size distribution. These grades are generally recommended for hardmetal, medical and electronic applications.

**Grades Available** **Product Designation**  
WMP HC S

### Chemical Characteristics<sup>1)</sup>

(Mass fraction in % [cg/g]; ppm [ $\mu\text{g/g}$ ])

	Range		Oxygen		[%]
	min.	max.	HC		
W	min.	99.95 % <sup>2)</sup>	HC 70 S	max.	0.5
Al	max.	10 ppm	HC 120 S	max.	0.25
Ca	max.	10 ppm	HC 170 S	max.	0.20
Cr	max.	80 ppm	HC 250 S	max.	0.15
Cu	max.	5 ppm			
Fe	max.	100 ppm			
Mo	max.	100 ppm			
Na	max.	20 ppm			
Ni	max.	100 ppm			
Si	max.	30 ppm			

### Physical Characteristics

Fisher Number (as supplied)	Tolerances [ $\mu\text{m}$ ]		Tap volume <sup>3)</sup> [ $\text{cm}^3/100\text{g}$ ]		Apparent density <sup>4)</sup> [ $\text{g}/\text{inch}^3$ ]	
	min.	max.	min.	max.	min.	max.
HC 70 S	0.7	$\pm 0.1$	15	23	35	45
HC 120 S	1.2	$\pm 0.1$	12	18	40	60
HC 170 S	1.7	$\pm 0.2$	12	18	50	70
HC 250 S	2.5	$\pm 0.5$	10	15	55	85

1) Information on chemical analytical methods and list of analyzed items on request, 2) Oxygen content excluded.

3) TAP-PAK VOLUMETER per ASTM B 527, 4) SCOTT-VOLUMETER per ASTM B 329.

**Packaging**

- 50 kg in 18 l steel drums with PE-bags  
Packaging unit = 400 kg in 8 drums on CP1 pallet.
  - 100 kg in 30 l steel drums with PE-bags  
Packaging unit = 800 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 (Directive 67/548/EEC Article 26, Directive 1999/45/EC Article 13 and REGULATION (EC) No 1272/2008 Article 48)**  
highly flammable.

**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

[Further contact addresses](#)

[info@hcstarck.com](mailto:info@hcstarck.com)

[www.hcstarck.com](http://www.hcstarck.com)