POWDERS FOR THE HARDMETAL INDUSTRY

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TANTALUM CARBIDE, TaC HGS
TANTALUM / NIOBIUM CARBIDE, TaNbC HGS
NIOBIUM CARBIDE, NbC HGS

Description of Product

All carbides of the compounds of Ta/Nb and TaC and NbC are mainly used as additives to produce hardmetals, cermets and alloys.

Grades Available

Product Designation			
TaC	HGS	TaNbC 67/33	HGS
TaNbC 90/10	HGS	TaNbC 60/40	HGS
TaNbC 80/20	HGS	TaNbC 50/50	HGS
TaNbC 75/25	HGS	NbC	HGS
TaNbC 70/30	HGS		

Chemical Characteristics[1)]
(Mass fraction in % [cg/g]; ppm [µg/g])

	Limit Ta	Nb	C_{total}	N
TaC			6.15 ± 0.15 %	max. 300 ppm
TaNbC 90/10	84 ± 1.5 %	9 ± 1.5 %	6.70 ± 0.15 %	max. 500 ppm
TaNbC 80/20	72 ± 1.5 %	20 ± 1.5 %	7.40 ± 0.15 %	max. 500 ppm
TaNbC 75/25	70 ± 1.5 %	22 ± 1.5 %	7.50 ± 0.15 %	max. 500 ppm
TaNbC 70/30	66 ± 1.5 %	27 ± 1.5 %	7.70 ± 0.15 %	max. 500 ppm
TaNbC 67/33	62 ± 1.5 %	30 ± 1.5 %	7.90 ± 0.15 %	max. 800 ppm
TaNbC 60/40	57 ± 1.5 %	34 ± 1.5 %	8.20 ± 0.15 %	max. 500 ppm
TaNbC 50/50	47 ± 1.5 %	44 ± 1.5 %	8.75 ± 0.15 %	max. 800 ppm
NbC			11.20 ± 0.20 %	max. 1000 ppm

All grades

C_{free}	max.	0.15	%
O	max.	0.35	%
Al, Ca, Si, Ti	each max.	100	ppm
Fe, W	each max.	500	ppm
S	max.	30	ppm

Physical Characteristics

All grades

Fisher number	1.0	±	0.3	µm

1) Information on chemical analytical methods and list of analyzed items on request.

Packaging

- 50 kg in 30 l steel drums with PE-bags
  Packaging unit = 300 kg in 6 drums on CP5 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.

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

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

None.

REACh Registration acc. REGULATION (EC) No 1907/2006 dated December 18, 2006

H.C. Starck is taking all necessary actions under REACh in order to continue the supply of its products. All components of the HCST products are registered, pre-registered or exempted from registration. You will find the REACH Registration No. (if already assigned) in section 1 or 3 of our EU Safety Data Sheet.

Hazardous Chemicals

According to H.C. Starck's (the Company) environmental policy, to the best of the Company´s knowledge, from the Company´s level of awareness at date and with respect to the directives listed herein (in the **currently valid and last amended version** - which have been reviewed after its publication by Company with regard to its relevance for the Company's aforementioned product), the Company assumes that the substances regulated by said directives are not contained in the product in amounts which exceed the applicable limits. The Company does not analyse the final product with regard to these substances, before the product is sent to the customer.

* REACH Regulation (EC) No 1907/2006 dated December 18, 2006
* REACH Regulation (EC) No 1907/2006, List of Candidates and Appendix XIV
* GHS/CLP Regulation (EC) No 1272/2008 dated December 16, 2008
* Directive 2011/65/EU of the European Parliament and the Council dated June 8, 2011 in respect of the restriction of the application of certain dangerous substances in Electrical and Electronic equipment (RoHS)
* Directive 94/62/EC of the European Parliament and the Council dated December 20, 1994 in respect of packaging and packaging waste

Conflict Free Smelter status

H.C. Starck is following the responsible minerals assurance process, status see
www.responsiblemineralsinitiative.org
see also the H.C. Starck Group Raw Material Policy
http://www.hcstarck.com

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