

## TUNGSTEN OXIDE BLUE

**Description of Product** Blue crystalline powder for the production of tungsten metal powders used in hardmetals, lamp wires or heating wires.

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

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

WO <sub>3</sub> (calculated) <sup>2)</sup>	min. 99.7 %
Al	max. 5 ppm
As	max. 4 ppm
B	max. 3 ppm
C	max. 30 ppm
Cl	max. 10 ppm
F	max. 10 ppm
Fe	max. 5 ppm
Mo	max. 10 ppm
Na	max. 5 ppm
P	max. 5 ppm
S	max. 10 ppm
Si	max. 15 ppm
V	max. 5 ppm

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

#### Standard grade

Apparent density	35 – 55 g/inch <sup>3</sup>
Fisher number (as supplied)	15 – 40 $\mu$ m
Sieve analysis +250 $\mu$ m	max. 1 %

#### Ultrafine Grade

Apparent density	15 – 25 g/inch <sup>3</sup>
Fisher number (as supplied)	max. 1.2 $\mu$ m
Sieve analysis +250 $\mu$ m	max. 1 %

**Packaging** **Standard Grade:** 150 kg in 60 L steel drum with polyethylene bag.  
**Ultrafine Grade:** 100 kg in 60 L steel drum with polyethylene bag.

Other kinds of packaging are available on request.

**Storage and Handling** The user must observe all the relevant safety regulations in force in the country of use. Store in a closed container.

**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.

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

2) Calculated as 100% - Loss on ignition (750°C/1.5h).

## **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 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 conflict free smelter program, status see  
See also the H.C. Starck Group Raw Material Procurement Statement

<http://www.conflictreesourcing.org>.  
<http://www.hcstarck.com>.

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The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by H.C. Starck. All information is given without warranty or guarantee. It is expressly understood and agreed that the customer assumes and hereby expressly releases H.C. Starck from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind H.C. Starck. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent. In case of order please refer to issue number of the respective product data sheet. All deliveries are based on the latest issue of the product data sheet and the latest version of our General Conditions of Sale and Delivery.