

1. Substance/preparation and company identification

1.1 Product details:

Trade name: Tungsten Carbide Surgery Burs/Cutters.
Part-Nr.:

1.2 Particulars of manufacturer/supplier: HAGER & MEISINGER GMBH

Address: Hansemannstr. 10,
Country code / post code / city: D-41468 Neuss Germany
Telephone: +49 2131/2012-0
Telefax: +49 2131/2012-222
Specialist advice
available from: Quality Assurance Department
Telephone: +49 2131/2012-184
Telefax: +49 2131/2012-222
In an emergency contact: Emergency telephone:

2. Composition/constituents

2.1 Chemical characterisation: Tungsten Carbide and Cobalt

2.2 Hazardous constituents: If used properly and according to current understanding, one need not anticipate that the constituents of this product will represent a hazard. Marking: None.

3. POSSIBLE HAZARDS

3.1 Hazards identification

Hazards: Assuming that the standard safety precautions for small rotary instruments and the general accident prevention precautions are heeded and the personal protection equipment is handled correctly: No particular hazards are known.

4 FIRST-AID MEASURES

4.1 In general: Refer to "VBG 103".

4.2 After inhalation: Fresh air. Under normal circumstances no further measures required.
Should symptoms persist, call a doctor

4.3 After skin contact: In case of allergic reactions, use protective gloves and special protective salve.

4.4 After eye contact: Rinse thoroughly with water, then consult an eye specialist immediately.

4.5 After ingestion: Consult a doctor.

4.6 Hints for doctors: symptomatic treatment

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media: Water, foam

5.2 Extinguishing media unsuitable for safety reasons:

5.3 Particular hazards due to the material, its combustion products or released gases:

5.4 Special protective equipment:

5.5 Further details

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions:

6.2 Environmental precautions: Not known to affect the environment.

6.3 Cleaning/disposal methods:

6.4 Further details:

7. HANDLING AND STORAGE

- 7.1 Handling: Dealing with the product safely: Refer to WBG 103". Personal protective equipment: Eye protection: Protective glasses. Hand protection: In case of regular, prolonged or intense skin contact, wear protective gloves. Respiratory protection: Mechanical extraction of the dust due to grinding.
- 7.2 Storage: Storage conditions (warehouse/containers): Only use containers intended specifically for this material/product. Ventilate the area adequately. Storage with other substances/prohibited substances: Do not store with oxidising agents. Storage class: Not applicable. Storage stability: If possible, temperatures between +50C and +500C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

- 8.1 Further details regarding the design of technical plant:
- 8.2 Constituents with limits relevant to the work area and which must be monitored: Please note: Heed the general accident prevention regulations, especially concerning the circumferential speed respectively the maximum permissible speeds for small rotary cutters.
- 8.3 Personal protection equipment: Protective and hygienic measures: Persons with an allergic predisposition against dust due to grinding should avoid regular, prolonged skin contact. If necessary, wear personal protection equipment. Clean and care for the skin. Do not eat, drink, smoke or sniff while working. Respiratory protection: Use a dust extractor. Hand protection: Assuming safety regulations permit, in case of intense skin contact we recommend protective gloves made of suitable plastic or synthetic rubber; otherwise apply special skin protection ointment. Eye protection: Tightly fitting protective glasses. Body protection: After work, clean and care for the skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1.1 Form: Firm.
- 9.1.2 Colour: Metallic, grey.
- 9.1.3 Odour: None.
- 9.2 Flammability: Non-flammable if used properly.
- 9.3 Melting temperature: 3400°C
- 9.4 Spontaneous combustion: None
- 9.5 Risk of explosion: None
- 9.6 Explosion limits: None
- 9.7 Density (T = 20 °C) 14.9 g/cm³
- 9.8 Solubility in water (T = 20°C): Virtually insoluble.
- 9.9 pH value:
- 9.10 Viscosity: Not applicable.
- 9.11 Flash point: Not applicable.
- 9.12 Thermal decomposition:
- 9.13 Further details:

10. STABILITY AND REACTIVITY

- 10.1 Conditions to avoid: Will not decompose if used properly.
- 10.2 Materials to avoid:
- 10.3 Hazardous decomposition products: None, if used and stored properly.
- 10.4 Further details:

11 INFORMATION ON TOXICOLOGY

- 11.1 Acute toxicity: No data available.
Primary irritant effect: No data available.
- 11.2 Subacute / chronic toxicity:
Long-term tests: No data available.
Experience with humans: No data available.
- 11.3 Additional toxicological details:

12 INFORMATION ON ECOLOGY

- 12.1 Elimination: (persistence and decomposition) Penetration of earth and inshore waters is harmless as it not decomposes chemically.
- 12.2 Reaction in the environment: Product sinks in water.
- 12.3 Ecological-toxic effects:
Marine toxicity: Harmless in water.
Sewerage plants: Can be eliminated from water by mechanical collection.
- 12.4 Further ecological details:

13 DISPOSAL CONSIDERATION

- 13.1 Product: Recommendation: Does not need disposing of.
- 13.2 Packaging:
Recommendation: Give to a registered disposal company.

14 TRANSPORT

Not considered hazardous as defined in the regulations.

15 Regulations

- 15.1 Labelling: Hazard symbol and warning: None required.
Hazardous components requiring labelling: None.
Hazard codes: None.
Safety codes: None.
Marking according to appendix II of the EU Preparation Guidelines: None.
- 15.2 National regulations:

16 FURTHER DETAILS

The details contained herein are based on the present state of our knowledge. They are intended to describe the safety requirements of our product and should not be construed as being contractual assurance of any specific properties.