



POWDERLOOP

SAFETY DATA SHEET

Section 1. Identification

Product name: Tungsten Carbide Powder
Product code: P-WC, P-CTC, P-SCTC

Supplier's details: PowderLoop Technology Ltd.
40 Warner Drive
Springwood Industrial Estate
Braintree, Essex
United Kingdom
CM7 2YW

Emergency tel: +44 7477 552959 9am-3:30pm Mon-Fri

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

Section 2. Hazards Identification

Classification according to European Regulation (EC) No. 1272/2008 Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

GB CLP hazard pictograms:



Hazard codes and statements
H316: Causes mild skin irritation
H320: Causes eye irritation
H335: May cause respiratory irritation

Precaution/Prevention
: Wear protective gloves, eye or face protection, protective clothing. Wash hands thoroughly after handling.
: If in EYES: Rinse with plenty of water. Remove contact lense and continue rinsing. If eye irritation persists: Get medical attention.
: Target Organs: Lungs and respiratory syste. Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
: Dispose of contents and container in accordance with all local, regional, national and international regulations.
: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

Potential health effects (for powder exposure only)
EYES: may cause irritation-redness, pain or itching
SKIN: May cause skin irritation
INHALATION: May cause coughing, dyspnea, soreness in the chest, weight loss, hemoptysis, bronchitis and asthma.
INGESTION: May cause gastrointestinal irritation.
MEDICAL CONDITIONS AGGRAVATED: Certain pulmonary and skin conditions may be aggravated by exposure.
CHRONIC OVEREXPOSURE: May cause 'hard metal lung' with symptoms as described above for inhalation. Previously exposed individuals may be at increased risk.
ACUTE OVEREXPOSURE: See eyes, skin and inhalation.
CARCINOGENICITY: None

Section 3. Composition /information on ingredients

Chemical name:	wt%
Tungsten carbide	>95

Section 4. First-aid measures

Inhalation: If symptoms of coughing, wheezing, and shortness of breath are persistent remove them from exposure area to fresh air immediately.

Eye: Flush with large amounts of water for 15 minutes. If irritation occurs, seek medical attention.

Ingestion: If large amounts are ingested, consume large quantities of water and induce vomiting. Seek medical attention. Wash out mouth with plenty of water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If vomiting and/or unconscious, get medical attention immediately.

Skin contact: Wash with soap and water. If irritation occurs, seek medical attention.

Section 5. Fire-fighting measures

Flammable properties: Non-flammable
Flash point: none
Flammable limits (% Vol in Air):
Lower: none ; Upper: none
Auto ignition temperature: N/A
Hazardous combustion products: Acid smoke and irritating fumes
Extinguishing media: Dry extinguishing powder
Firefighting instructions: Fine tungsten carbide powder (< 1 micron) can be a fire and explosive hazard when exposed to high temperatures or ignition sources.

Section 6. Accidental release measures

Small/Large spill: Sweep up with a minimum of dust generation and place into suitable clean dry containers for later disposal or reclamation. Residue should be cleaned up using a high efficiency particulate filter vacuum or wet cleanup. Use appropriate respiratory protection.

Section 7. Handling and storage

Handling: Avoid dispersion of dust in air. Finely divided particles, dust or fumes may be flammable or explosive. Keep away from sparks or ignition sources.
Storage: Keep away from sparks or ignition. Contents should be stored in a clean, dry, cool area. Keep container closed and wash thoroughly after handling.

Section 8. Exposure controls / personal protection

Occupational exposure limit:

Name	Exposure limits	Comment
Tungsten & compounds (insoluble)	3 mg.m-3 (15-minute reference period) 1 mg.m-3 (8-hr TWA reference period)	

Engineering measures: Use adequate ventilation. Consider using local exhaust ventilation.

Hygienic measures: Wash hands, do not eat, drink or smoke when using.
Wear rubber/latex gloves and lab coat. Employees must wear appropriate clothing and equipment to prevent repeated or prolonged skin contact.

Personal protection:

Respiratory system: Wear suitable dust mask. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safeworking limits of the selected respirator.

Eyes: Safety glasses with side shields or goggles are recommended. An eyewash fountain should be provided in the immediate work area.

Section 9. Physical and chemical properties

Appearance

Colour	Dark Grey
Physical state	Powder
Specific gravity	15.7 g/cc
Boiling point	6000°C
Soluble in water	Insoluble

Section 10. Stability and reactivity

Chemical stability: : Stable
: Oxidising agents. Tungsten is slightly soluble in nitric acid, sulfuric acid and aqua regia. It is soluble in a mixture of HF acid and nitric acid. Vigorous reaction with bromine trifluoride.

Incompatibility: Tungsten becomes incandescent in cold fluorine, lead oxide and iodine pentafluoride.

Hazardous decomposition products : None

Section 11. Toxicological information

Overexposure to this material in the form of metallurgical powder may cause eye, skin and mucous membrane irritation. Toxicity has not been quantified.

Section 12. Ecological information

No relevant information found.

Section 13. Disposal considerations

Material can be reclaimed, if not dispose of the material in accordance with all government regulations.

Section 14. Transport information

Hazard class: None

Not Hazardous

Not regulated by IATA, Not restricted for transport by air by IATA

Section 15. Regulatory information

European Regulation (EC) No. 1272/2008

Section 16. Other information

Risk/safety Phrases

22 Do not breathe dust

33 Take precautionary measures against static discharges

DISCLAIMER The data in this Material Safety Data Sheet (MSDS) relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.