



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identity/Trade Name: Tungsten Carbide

Chemical Name: Cemented Carbide product with Cobalt Binder, Brazed Rotary Files (Bur Products)

Manufacturer: ATA Tools Inc.

238 Marc Drive

Cuyahoga Falls, OH 44223

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Preparation Date: 5/1/2013

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Material	CAS Number	Percent By Weight*	OSHA	ACGIH
			PEL mg/m3	TLV mg/m3
Tungsten Carbide (limits for Tungsten dust)	12070-12-1	7-97%	---	5
Cobalt	7440-48-4	3-20%	0.10	0.02
Nickel	7440-02-0	0-20%	1.0	1.5
Tantalum Carbide (limits for Tantalum dust)	12070-06-3	0-57%	5.0	5
Titanium	134563-67-7	0-53%	15	10
Titanium Carbide	12070-08-5	0-13%	15	10
Molybdenum Carbide	12069-89-5	0-15%		
Molybdenum Disulfide	7439-98-7	0-2%		
Niobium Carbide	12011-99-3	0-12%		
Chromium Carbide	12012-35-0	0-5%	0.5	0.5
Vanadium Carbide	11130-21-5	0-5%	0.5	0.5
Chromium, trivalent	7440-47-3	0-3%	0.5	0.5
Boron	1303-86-2	0-2%	15	10
Zirconium	7440-67-7	0-2%	5	5.0
Iron	1309-37-1	0-2%	10	5.0
Hafnium Carbide	7440-58-6	0-1%	0.5	0.5
Polycrystalline Diamond	7782-40-3	0-50%		
Cubic Boron Nitride	10043-11-5	0-50%		

*Exact Percentages Depend on Grade Specifications

Braze Tool Shanks may contain the following chemicals

Material	CAS Number	Percent By Weight	OSHA	ACGIH
			PEL mg/m3	TLV mg/m3
Iron	1309-37-1	95%	10.0	5.0
Carbon (Carbon Oxide)	7440-44-0	0.38-0.43%	55.0	
Carbon (Carbon Black)	7440-44-0	0.38-0.43%	3.5	3.5
Manganese (Dust)	7439-96-5	0.75-1.0%	5.0	5.0
Manganese (Fumes)	7439-96-5	0.75-1.0%		1.0
Phosphorus	7723-14-0	0-0.25%	0.1	0.1
Sulfur	7704-34-9	0-0.25%		5.0
Silicon	7740-21-3	0.2-0.35%		5.0
Nickel	7740-02-0	0.4-0.7%		
Chromium	7740-47-3	0.4-0.6%	1.0	0.5
Molybdenum	7439-98-7	0.2-0.3%	15.0	10
Copper	7440-50-8	<0.35%	1.0	1.0

Tin	7440-31-5	<0.25%	10.0	
Vanadium	1314-62-1	<0.35%	0.5	0.5
Aluminum	7429-90-5	0.01-0.20		10.0
Titanium	13463-67-7	<0.25%	15.0	5.0
Columbium	7440-25-7	<0.25%		
<i>Coatings/Rust Preventative</i>				
Petroleum Naptha	6032-32-4		500	100

Brazing Discs (less than 1% total weight of tool)

Material	CAS Number	Percent By Weight	OSHA PEL	ACGIH TLV
Silver	7440-22-4	10-70	0.01	0.1
Copper	7440-50-8	15-70	0.1	0.2 (fume)
Zinc	7440-66-6	5-44	5 (fume)	5
Nickel	7440-02-0	0.2-10	1	1.5
Manganese	7439-96-5	1-8	5 "ceiling"	0.2

SECTION 3 – HAZARDS IDENTIFICATION

Appearance and Odor: Dark Gray Metal/No Odor

Grinding cemented carbide product will produce dust of potentially hazardous ingredients that can be inhaled, swallowed or come in contact with the skin or eyes.

Primary Routes of Exposure	Effects of Overexposure	Emergency First Aid Applicable for Mists and Dusts
Inhalation	Dust from grinding can cause irritation of the nose and throat. It also has the potential for causing transient or permanent respiratory disease, including occupational asthma and interstitial fibrosis, in a small percentage of exposed individuals. It is reported that cobalt dust is the most probable cause of such respiratory diseases. Symptoms include productive cough, wheezing, and shortness of breath, chest tightness and weight loss. Interstitial fibrosis (lung scarring) can lead to permanent disability or death. Certain pulmonary conditions may be aggravated by exposure.	If symptoms of pulmonary involvement develop (coughing, wheezing, shortness of breath, etc.) remove from exposure and seek medical attention.
Skin Contact	Can cause irritation or an allergic skin rash due to cobalt sensitization. Certain skin conditions, such as dry skin, may be aggravated by exposure.	If irritation or rash occurs, thoroughly wash affected area with soap and water and isolate from exposure. If irritation or rash persists, seek medical attention.
Eye Contact	Can cause irritation.	If irritation occurs, flush with copious amounts of water. If irritation persists, seek medical attention.
Ingestion	Reports outside the industry suggest that ingestion of significant amounts of cobalt has the potential for causing blood, heart and other organ problems.	If substantial quantities are swallowed, dilute with a large amount of water, induce vomiting and seek medical attention.

Note: Health effects listed are for exposure powders, dust, or mist from grinding. No health effects have been reported for exposure in solid form.

California Proposition 65 Compliance – WARNING: This product contains a chemical known to the state of California to cause cancer.

SECTION 4 – FIRST AID MEASURES

Inhalation: If symptoms of pulmonary involvement develop (coughing, wheezing, shortness of breath), remove from exposure area to fresh air immediately. Get medical attention immediately.

Skin Contact: Wash affected area with soap or mild detergent and large amounts of water until no evidence of material remains (approximately 15-20 minutes). Get medical attention.

Eye Contact: If irritation occurs, flush eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of material remains (approximately 15-20 minutes). Get medical attention if irritation persists. Obtain immediate medical attention for foreign body in the eye.

Ingestion: If dust has been swallowed get medical attention immediately.

SECTION 5 – FIRE-FIGHTING MEASURES

Flash Point: Non-Combustible **Flammable Limits:**N/A LEL: -- -- UEL: -- --

Hard Cemented Carbide Product is not a fire hazard. Dusts generated in grinding operations may ignite if allowed to accumulate and subjected to an ignition source.

Extinguishing Media: For powder fires smother with dry sand, dry dolomite, ABC type fire extinguisher, or flood with water.

Special Fire Fighting Procedures: For a powder fire confined to a small area, use a respirator approved for toxic dusts and fumes. For a large fire, fire fighters should use self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Dusts may present a fire or explosion hazard under rare favoring conditions of particle size, dispersion and strong ignition source. However, this is not expected to be a problem under normal handling conditions.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

If material is released or spilled: Clean up, using methods to avoid dust generation, such as vacuum (with appropriate filter to prevent airborne dust levels which exceed the PEL or TLV), wet dust mop or wet clean up. If airborne dust is generated, use an appropriate NIOSH approved respirator.

SECTION 7 – HANDLING AND STORAGE

Handling and Storage: Minimize free fall of powder and avoid dispersion of dust in air. Finely divided particles, dust, or fumes may be flammable or explosive. Keep away from sparks or ignition sources. Contents should be stored in a clean, cool area. Maintain good housekeeping procedures to prevent dust accumulation during grinding. Avoid dust inhalation and direct skin contact with dust.

Other Precautions: Clean up, using methods to avoid dust generation such as vacuum (with appropriate filter to prevent airborne dust levels which exceed the PEL or TLV), wet dust mop or wet clean up. If airborne dust is generated, use an appropriate NIOSH approved respirator.

Hygienic Practice: Wash hands thoroughly after handling and before eating or smoking. Wash exposed skin at the end of the work shift. Do not shake clothing, rags or other items to remove dust. Dust should be removed by washing or vacuuming (with appropriate filters) the clothing, rags, or other items. Periodic medical examinations are recommended for individuals regularly exposed to dust or mist.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Use an appropriate NIOSH approved respirator if airborne dust concentration exceeds the appropriate PEL or TLV. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

Ventilation: Use local exhaust ventilation that is adequate to limit personal exposure to airborne dust to levels that do not exceed the PEL or TLV. If such equipment is not available, use respirators as specified above.

Protective Gloves: Protective Gloves or Barrier cream are recommended when contact with dust or mist is likely. Prior to applying the Barrier cream or use of protective gloves, wash thoroughly.

Eye Protection: Safety glasses with side shields or goggles should be worn.

Other Protective Equipment: Make sure tool is properly seated and safely clamped or held in place according to approved procedures. Always use machine guards and wear safety glasses and protective clothing to prevent injury in the event of tool breakage.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Dark Gray Metal/No Odor

Boiling Point: N/A
Flash Point: N/A
Vapor Pressure (mm Hg): N/A
Vapor Density (Air = 1): N/A

Specific Gravity (H₂O=1): 11.0 to 15.5
Solubility in Water: Insoluble
Evaporation Rate: N/A
How Best Monitored: Air Sample

SECTION 10 – STABILITY AND REACTIVITY

Stability: Unstable:
Stable:

Conditions to Avoid: N/A

Incompatibility: Contact of dust with strong oxidizers cause fire or explosion.

Materials to Avoid: Strong Acids

Hazardous Decomposition Products: None

Hazardous Polymerization: May Occur:
Will Not Occur:

Conditions to Avoid: N/A

Conditions to Avoid: N/A

SECTION 11 – TOXICOLOGICAL INFORMATION

Cobalt: Carcinogenic status: The International Agency for Research on Cancer (IARC) lists Cobalt and Cobalt compounds as Category 2B carcinogens (Possibly carcinogenic to Humans). Cobalt fumes or dust may cause pulmonary, skin, or eye irritation. Cobalt may be a sensitizing agent for skin and the respiratory system.

SECTION 12 – ECOLOGICAL INFORMATION

No ecological data is available for this product. No hazards to the environment are expected from this product. However, consideration must be given to potential environment effects of the base material being processed.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with all applicable local, state/provincial and federal regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations. May be sold as scrap for reclaim.

SECTION 14 – TRANSPORT INFORMATION

DOT Hazardous Materials Description:
Proper Shipping Name: Not Regulated
UN Number: None
Hazard Class/Packing Group: None
Labels Required: None

SECTION 15 – REGULATORY INFORMATION

Some ingredients in cemented tungsten carbide products, including Cobalt, Nickel, Copper, Chromium and Chromium Compounds, are subject to the requirements of Section 313 of Title II of Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Our carbide product contains between 3.0% and 20.0% cobalt (CAS 7440-48-4) which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments of the Reauthorization Act of 1986 40 CFR 372.

California Proposition 65: This product contains cobalt and nickel, which are listed in California Prop 65 as a known cancer causing chemical.

Canadian WHMIS Classification: Not a controlled product. This product meets the definition of a "manufactured article" under the WHMIS regulations.

SECTION 16 – OTHER INFORMATION

Although ATA Tools Inc. has attempted to provide current and accurate information herein, ATA Tools Inc. makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person.

It shall be the responsibility of the customer purchasing this product to ensure that all employees/users of this product are familiar with and trained in the handling, use and hazards associated with this product as contained herein. This responsibility shall also extend directly to the user.



June 1, 2015

Re: Safety Data Sheet

To Whom It May Concern:

In response to your request for a Safety Data Sheet (SDS) for Rotor Files (Burs), Fiberglass Routers (FGRs), Internal Grinding Tools (IGTs) and Composite Routers manufactured by ATA Tools, Inc. of 238 Marc Dr. Cuyahoga Falls, Ohio 44223:

The material in question is an "article" as defined by the United States Department of Labor, Occupational Safety and Health Administration (OSHA) and is a "manufactured article" as defined by the Canadian Hazardous Products Act (R.S.C., 1985, c. H-3) and as such is exempt from the requirement for creation of a SDS.

US Federal OSHA defines an "article" as follows at 29 CFR 1910.1200 (c):

Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

The Canadian Federal Hazardous Products Act defines a "manufactured article" as follows at Part II Controlled Products, Interpretation, Definitions, paragraph 11(1):

"manufactured article" means any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, under normal conditions of use, will not release or otherwise cause a person to be exposed to a controlled product;

EU REACH similarly defines an article as follows per Article 3(3) of the REACH Regulation

Article: means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition;

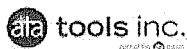
Rotor Files (Burs), Fiberglass Routers (FGRs), Internal Grinding Tools (IGTs) and Composite Routers do not have an intended release in the application or use of the product. Any product which meets the definition of an "article" or a "manufactured article" is exempt from the requirement to provide a SDS.

If you should need additional information, please contact your Sales or Customer Service Representative at 1-(330) 928-7744.

Best Regards,

A handwritten signature in black ink, appearing to read "Jeremy Entekin".

Jeremy Entekin
Quality and Safety Manager



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