



# MATERIAL SAFETY DATA SHEET

PART NUMBERS: 101250 - 101251

## SECTION 1 PRODUCT IDENTIFICATION AND MANUFACTURE

**SUPPLIER:** METPREP LTD.  
CURRIERS CLOSE  
CHARTER AVENUE  
COVENTRY CV4 8AW  
TELEPHONE: 024 7642 1222  
FAX: 024 7642 1192

**DESCRIPTION** Type – High Concentration

**PRODUCT:** Diamond Cut-Off Wheel

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Iron	7439-89-6	30 – 60 by weight	231-096-4
Tin	7440-31-5	1 – 5 by weight	231-141-8
Zinc oxide	1314-13-2	5 – 10 by weight	215-222-5
Copper	7440-50-8	10 – 30 by weight	231-159-6
Nickel	7440-02-0	1 – 5 weight	231-111-4
Tungsten	7440-33-7	5 – 10 by weight	231-143-9
Chromium	7440-47-3	1 – 5 weight	231-157-5
Lead	7439-92-1	0 – 1 by weight	231-100-4
Cobalt	7440-48-4	5 – 10 by weight	231-158-0
Diamond	7782-40-3	1 – 5 by weight	

## SECTION 3 HAZARDS IDENTIFICATION

Potential Health Effects:

- Eye: Dust may cause slight irritation
- Skin: Dust from this product may cause temporary mechanical irritation.
- Inhalation: Dusts from this product may cause mechanical irritation of the Nose, throat and respiratory tract.
- Ingestion: Ingestion of this product is unlikely. However, ingestion of product May produce gastrointestinal irritation and disturbances.
- Chronic Health Effects: Chronic health effects are not expected as long as good hygiene and proper safety precautions are practiced.



#### SECTION 4 FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact:	Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation:	If dust from cutting or drilling is inhaled, remove the affected person to Fresh air. If symptoms persist, get medical attention.
Ingestion:	Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. If symptoms persist, call a physician.
Note to Physicians:	No information available.

#### SECTION 5 FIRE FIGHTING MEASURES

Flammable Properties:	Non Flammable.
Flash Point:	Does not apply.
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not available.
Upper Flammable/Explosive Limit:	Not available.
Extinguishing Media:	Use any extinguishing media appropriate for the surrounding fires.
Unsuitable media	None.
Protective Equipment:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### **NFPA Ratings**

NFPA Health:	1
NFPA Flammability:	0
NFPA Reactivity:	1
NFPA Other:	



<b>SECTION 6</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
------------------	------------------------------------

Methods for containment:	Containment of this material should not be necessary.
Methods for cleanup:	Shovel or sweep up for re-use or disposal. Avoid creating dusty conditions. Evaluate to determine if it is a hazardous waste by characteristic. Dispose of in accordance with Local, State, Federal and Provincial Regulations.

<b>SECTION 7</b>	<b>HANDLING AND STORAGE</b>
------------------	-----------------------------

Handling:	Always HANDLE AND STORE wheels in a CAREFUL manner. Always VISUALLY INSPECT all wheels before mounting. Always CHECK MACHINE SPEED against the established Maximum safe operating speed MARKED ON THE WHEEL.
Storage:	No special storage conditions required.
Hygiene Practices:	Wear suitable gloves and eye/face protection.

<b>SECTION 8</b>	<b>EXPOSURE CONTROL/PERSONAL PROTECTION</b>
------------------	---

Engineering Controls:	General dilution ventilation and/or local exhaust ventilation Should be provided as necessary to maintain exposures Below occupational exposure limits.
Eye/Face Protection:	Always WEAR SAFETY GLASSES or some type of eye Protection when grinding.
Skin Protection Description:	Protective gloves. Long sleeved shirt and long pants.
Respiratory Protection:	When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators. A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.
Other Protective:	Use of this product may create elevated sound levels. Hearing protection should be worn where required (see OSHA 29 CFR 1910.134 and other applicable regulations).
General Hygiene Considerations:	Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Avoid getting dust into boots and gloves through wrist bands and pant tucks.



EXPOSURE GUIDELINES

Ingredient	Guideline OSHA	Guideline ACGIH	Quebec Canada	Ontario Canada	Alberta Canada
Iron				OEL-TWAEV:5mg/m <sup>3</sup>	
Tin	PEL-TWA: 2 mg/m <sup>3</sup>	TLV-TWA: 2 mg/m <sup>3</sup>	VEMP-TWA: 2 mg/m		OEL-TWA: 2 mg/m <sup>3</sup>
Zinc oxide	PEL-TWA: 15 mg/m <sup>3</sup> Total particulate/dust (T) PEL-TWA: 5 mg/m <sup>3</sup> Respirable fraction (R) PEL-TWA: 5 mg/m <sup>3</sup>	TLV-TWA: 2 mg/m <sup>3</sup> Respirable fraction (R) TLV-STEL: 10 mg/m <sup>3</sup> Respirable fraction (R)	VEMP-TWA: 10 mg/m <sup>3</sup> Total particulate/dust (T) VEMP-TWA: 5 mg/m <sup>3</sup>	OEL-TWAEV: 2mg/m <sup>3</sup> Respirable fraction (R) OEL-TWAEV: 10 mg/m <sup>3</sup> Total particulate/dust (T)	OEL-TWA:10 mg/m <sup>3</sup> OEL-TWA: 5 mg/m <sup>3</sup> OEL-STEL: 10 mg/m <sup>3</sup>
Copper	TLV-TWA: 1 mg/m <sup>3</sup> (Dusts and/or mists as Cu) TLV-TWA: 0.1 mg/m <sup>3</sup> (Fume as Cu)	TLV-TWA: 1 mg/m <sup>3</sup> (Dusts and/or mists as Cu) TLV-TWA: 0.2 mg/m <sup>3</sup> (Fume as Cu)	VEMP-TWA: 1 mg/m <sup>3</sup> VEMP-TWA: 0.2 mg/m <sup>3</sup>		OEL-TWA: 1 mg/m <sup>3</sup> OEL-TWA:0.2 mg/m <sup>3</sup>
Nickel	PEL-TWA: 1 mg/m <sup>3</sup> PEL-TWA: 1 mg/m <sup>3</sup> PEL-TWA: 1 mg/m <sup>3</sup>	TLV-TWA: 1.5 mg/m <sup>3</sup> Inhalable fraction (I) TLV-TWA: 0.2 mg/m <sup>3</sup> Inhalable fraction (I) TLV-TWA: 0.1 mg/m <sup>3</sup> Inhalable fraction (I)	VEMP-TWA: 1 mg/m <sup>3</sup> VEMP-TWA: 1 mg/m <sup>3</sup> VEMP-TWA: 0.1 mg/m <sup>3</sup>	OEL-TWAEV: 1 mg/m <sup>3</sup> Inhalable fraction (I) OEL-TWAEV: 0.2 mg/m <sup>3</sup> Inhalable fraction (I)	OEL-TWA: 1 mg/m <sup>3</sup> OEL-TWA:0.2 mg/m <sup>3</sup> OEL-TWA: 0.1 mg/m <sup>3</sup>
Tungsten		TLV –TWA: 5 mg/m <sup>3</sup> TLV-TWA: 5 mg/m <sup>3</sup> TLV-TWA: 1 mg/m <sup>3</sup> TLV-STEL:10 mg/m <sup>3</sup> TLV-STEL:10 mg/m <sup>3</sup> TLV-STEL: 3 mg/m <sup>3</sup>	VEMP-TWA: 5 mg/m <sup>3</sup> VEMP-TWA: 1 mg/m <sup>3</sup> VEMP-STEL:10 mg/m <sup>3</sup> VEMP-STEL: 3 mg/m <sup>3</sup>		OEL-TWA: 5 mg/m <sup>3</sup> OEL-TWA: 5 mg/m <sup>3</sup> OEL-TWA: 1 mg/m <sup>3</sup> OEL-STEL:10mg/m <sup>3</sup> OEL-STEL:10mg/m <sup>3</sup> OEL-STEL: 3mg/m <sup>3</sup>
Chromium	PEL-TWA: 1 mg/m <sup>3</sup> as Cr metal PEL-TWA: 0.5 mg/m <sup>3</sup> as Cr (III) PEL-TWA: 0.005 mg/m <sup>3</sup> as Cr (VI)	TLV-TWA: 0.5 mg/m <sup>3</sup> As Cr metal TLV-TWA: 0.5 mg/m <sup>3</sup> as Cr (III) TLV-TWA: 0.01 mg/m <sup>3</sup> as Cr (VI)	VEMP-TWA: 0.5 mg/m <sup>3</sup> VEMP-TWA: 0.01 mg/m <sup>3</sup> VEMP-TWA: 0.05 mg/m <sup>3</sup> Sensitizer: Sen Sensitizer: Sen	OEL-TWAEV: 0.01 mg/m <sup>3</sup>	OEL-TWA:0.5 mg/m <sup>3</sup> OEL-TWA:0.5 mg/m <sup>3</sup> OEL-TWA: 0.5 mg/m <sup>3</sup> OEL-TWA:0.01 mg/m <sup>3</sup> OEL-TWA:0.05mg/m <sup>3</sup> OEL-STEL:1.5 mg/m <sup>3</sup> OEL-STEL:1.5 mg/m <sup>3</sup>
Lead	PEL-TWA: 0.05 mg/m <sup>3</sup>	TLV-TWA: 0.05 mg/m <sup>3</sup>	VEMP-TWA: 0.15 mg/m <sup>3</sup>	OEL-TWAEV: 0.05 mg/m <sup>3</sup>	OEL-TWA: 0.05 mg/m <sup>3</sup>
Cobalt	PEL-TWA: 0.1 mg/m <sup>3</sup>	TLV-TWA: 0.02 mg/m <sup>3</sup> TLV-TWA: 0.02 mg/m <sup>3</sup>	VEMP-TWA: 0.02 mg/m <sup>3</sup> VEMP-TWA: 0.02	OEL-TWAEV: 0.02 mg/m <sup>3</sup>	OEL-TWA: 0.05 mg/m <sup>3</sup> OEL-TWA: 0.05 mg/m <sup>3</sup>
Ingredient	<b>Mexico</b>	<b>British Columbia Canada</b>			
Tin	LMPE-PPT: 2 mg/m <sup>3</sup> LMPE-CT: 4 mg/m <sup>3</sup>	OEL-TWA: 2 mg/m <sup>3</sup>			
Zinc oxide	LMPE-PPT: 10 mg/m <sup>3</sup> LMPE-PPT: 5 mg/m <sup>3</sup> LMPE-CT: 10 mg/m <sup>3</sup>	OEL-TWA: 2 mg/m <sup>3</sup> Respirable fraction (R) OEL-STEL: 10 mg/m <sup>3</sup> Respirable fraction (R)			
Copper	LMPE-PPT: 1 mg/m <sup>3</sup> LMPE-PPT: 0.2 mg/m <sup>3</sup> LMPE-CT: 2 mg/m <sup>3</sup> LMPE-CT: 2 mg/m <sup>3</sup>	OEL-TWA: 1 mg/m <sup>3</sup> OEL-TWA: 0.2 mg/m <sup>3</sup>			
Nickel	LMPE-PPT:1mg/m <sup>3</sup> LMPE-PPT: 0.1 mg/m <sup>3</sup> LMPE-CT: 0.3 mg/m <sup>3</sup>	OEL-TWA: 0.05 mg/m <sup>3</sup> OEL-TWA: 0.05 mg/m <sup>3</sup> OEL-TWA: 0.05 mg/m <sup>3</sup>			
Tungsten	LMPE-PPT: 5 mg/m <sup>3</sup> LMPE-PPT: 1 mg/m <sup>3</sup> LMPE-CT: 10mg/m <sup>3</sup> LMPE-CT: 3 mg/m <sup>3</sup>	OEL-TWA: 5 mg/m <sup>3</sup> OEL-TWA: 5 mg/m <sup>3</sup> OEL-TWA: 1 mg/m <sup>3</sup> OEL-STEL:10mg/m <sup>3</sup> OEL-STEL:10mg/m <sup>3</sup> OEL-STEL: 3 mg/m <sup>3</sup>			



Chromium	LMPE-PPT: 0.5 mg/m <sup>3</sup> LMPE-PPT: 0.5 mg/m <sup>3</sup> LMPE-PPT: 0.01 mg/m <sup>3</sup> LMPE-PPT: 0.05 mg/m <sup>3</sup> LMPE-PPT: 0.01 mg/m <sup>3</sup> LMPE-PPT: 0.05 mg/m <sup>3</sup>	OEL-TWA: 0.5 mg/m <sup>3</sup> OEL-TWA: 0.5 mg/m <sup>3</sup> OEL-TWA: 0.01 mg/m <sup>3</sup> OEL-TWA: 0.02 mg/m <sup>3</sup> OEL-Ceiling/Peak: 0.1 mg/m <sup>3</sup>			
Lead	LMPE-PPT: 0.15 mg/m <sup>3</sup>	OEL-TWA: 0.05 mg/m <sup>3</sup> OEL-TWA: 0.05 mg/m <sup>3</sup>			
Cobalt	LMPE-PPT: 0.1 mg/m <sup>3</sup>	OEL-TWA: 0.02 mg/m <sup>3</sup> OEL-TWA: 0.02 mg/m <sup>3</sup>			

<b>SECTION 9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
------------------	---

**Physical State Appearance:** Solid article

**Odor:** Odorless

**Flash Point:** Does not apply

**Auto Ignition Temperature** Not determined

<b>SECTION 10</b>	<b>STABILITY AND REACTIVITY PROPERTIES</b>
-------------------	--

**Chemical Stability:** Stable under normal conditions.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid:** Keep away from heat, sparks, or open flame.

**Special Decomposition Products:** In use, dust and decomposing odors may be generated. In most cases, the material removed from the workplace will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.

**SECTION 11****TOXICOLOGICAL INFORMATION**

Acute Toxicity: This product has not been tested for its toxicity.

**Nickel** :

ACGIH: A5 – Not Suspected as a Human Carcinogen As Ni element.

NIOSH: NIOSH carcinogen

OSHA: No Data

IARC: Group 2B – Possibly carcinogenic to humans.

NTP: RAC – Reasonably anticipated to be a human carcinogen.

**Iron** :

RTECS Number: N08225000

**Tin** :

RTECS Number: XP7320000

**Zinc oxide** :

RTECS Number: ZH4817000

**Copper** :

RTECS Number: GL7440000

**Nickel** :

RTECS Number: QR6555000

**Tungsten:**

RTECS Number: YO7175000

Eye: Eye – Rabbit Standard Draize test. 500 mg/24H (RTECS)

Skin: Administration onto the skin – Rabbit Standard Draize test:  
500 mg/24H (RTECS)

**Chromium:**

RTECS Number: GB4200000

**Lead:**

RTECS Number: OF7525000

**Cobalt:**

RTECS Number: GG0375000



**SECTION 12 ECOLOGICAL INFORMATION**

Biodegradation: In harsh environments, metal bonded products will decay similar to their metallic components.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Waste Disposal: Use standard landfill methods consistent with applicable Federal State, Provincial and local laws.

**SECTION 14 TRANSPORT INFORMATION**

DOT Shipping Name: Not regulated as hazardous material for transportation.

DOT UN Number: Not regulated as hazardous material for transportation.

IATA Shipping Name: Not regulated as hazardous material for transportation.

Canadian Shipping Name: This product is Not Regulated under the Transportation of Dangerous Goods Act. (CAN).

**SECTION 15 REGULATORY INFORMATION**

Inventory Status

	Canada DSL	TSCA Inventory Status			
Iron	Listed	Listed			
Tin	Listed	Listed			
Zinc oxide	Listed	Listed			
Copper	Listed	Listed			
Nickel	Listed	Listed			
Tungsten	Listed	Listed			
Chromium	Listed	Listed			
Lead	Listed	Listed			
Cobalt	Listed	Listed			

**Tin :**

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List  
0.1%.1571(804)

**Zinc oxide**

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List  
0.1%.1717(1326)



Section 313: EPCRA – 40 CFR Part 372 – (SARA Title III) Section 313 Listed Chemical.

**Copper :**

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List  
0.1%.433(578)

Section 313: EPCRA – 40 CFR Part 372 – (SARA Title III) Section 313 Listed Chemical.

**Nickel :**

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure:  
0.1%.1126(1193)

CA PROP 65: Listed: cancer

Section 313: EPCRA – 40 CFR Part 372 – (SARA Title III) Section 313 Listed Chemical.

**Tungsten :**

Canada IDL : Identified under the Canadian Hazardous Products Act Ingredient Disclosure List:  
0.1%.1664(1703)

**Chromium :**

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List:  
0.1%.399(561)

Section 313: EPCRA – 40 CFR Part 372 – (SARA Title III) Section 313 Listed Chemical.

**Lead :**

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List:  
0.1%.937(1435)

Section 313: EPCRA – 40 CFR Part 372 – (SARA Title III) Section 313 Listed Chemical.

**Cobalt :**

Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List  
0.1%.417(566)

CA PROP 65: Listed: cancer

Section 313: EPCRA – 40 CFR Part 372 – (SARA Title III) Section 313 Listed Chemical.

**Iron :**

EC Number: 231-096-4

**Tin :**

EC Number: 231-141-8

**Zinc oxide :**

EC Number: 215-222-5

**Copper :**

EC Number: 231-159-6





**Nickel :**

EC Number: 231-111-4

**Tungsten :**

EC Number: 231-143-9

**Chromium :**

EC Number: 231-157-5

**Lead :**

EC Number: 231-100-4

**Cobalt :**

EC Number 231-158-0

**State Right to Know**

	<b>RI</b>	<b>NY</b>	<b>MN</b>	<b>MI</b>	<b>IL</b>
Nickel	Listed	Listed	Listed	Listed	Listed

	<b>PA</b>	<b>MA</b>	<b>NJ</b>		
Tin	Listed	Listed	Listed: NJ Hazardous List; Substance Number: 1858		
Zinc oxide	Listed	Listed			
Copper	Listed	Listed: Massachusetts Oil and Hazardous List	Listed: NJ Hazardous List; Substance Number:0528		
Nickel	Listed	Listed: Massachusetts Oil and Hazardous List	Listed: NJ Hazardous List; Substance Number: 1341		
Tungsten	Listed	Listed			
Chromium	Listed	Listed: Massachusetts Oil and Hazardous List	Listed: NJ Hazardous List; Substance Number: 0432		
Lead	Listed	Listed: Massachusetts Oil and Hazardous List	Listed: NJ Hazardous List; Substance Number: 1096		
Cobalt	Listed	Listed: Massachusetts Oil and Hazardous List	Listed: NJ Hazardous List; Substance Number: 0520		

**SECTION 16****OTHER INFORMATION****HMIS Ratings:**

HMIS Health Hazard:	1	
HMIS Fire Hazard	0	
HMIS Reactivity:	0	
HMIS Personal	X	
SDS Creation Date:		July 27, 2011
SDS Revision Date:		July 01, 2013