



SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Identifier: **Grinding and Cutting Wheels**
Product Use: Abrasive materials used for cutting and grinding metals
Item Code: RX_ . _ . _
Supplier Name: PowerWeld Inc.
Supplier Address: 2501 Beech Street
Valparaiso, IN 46383
Supplier Web Address: www.powerweldinc.com
Supplier Phone: 219-462-8700
1-800-826-9073
Manufacturer: Lemman Eastern Ltd.
Manufacturer Address: No. 5012 Wushan Building
Yan an Road d 9#, Hangzhou 31005, China
Manufacturer Web Address: www.leman-eastern.com
Manufacturer Phone: (86) 571-8808 9176
Emergency Phone: CHEMTREC (800) 424-9300
Prepared By: PowerWeld Inc.
Preparation Date: 18 January 2016

Section 2: Hazard Identification

Classification: No applicable
Label Elements: See label
Other Hazards: Dust may cause eye and respiratory irritation. Dust particles may cause abrasive injury to the eyes.

Section 3: Composition/Information on Hazardous Ingredients

HAZARDOUS INGREDIENTS	CAS NUMBER	APPROXIMATE CONCENTRATION (%)
Aluminum Oxide	1344-28-1	0 - 70
and/or Silicon Carbide	409-21-2	0 - 70
and/or Zirconium Oxide	1314-23-4	0 - 30
and/or Cubitron	-	0 - 20
and/or Titanium Oxide	13463-67-7	0 - 5
Cured Phenolic Resin	-	5 - 20
and/or Woven Fibreglass	-	0 - 20
and/or Calcium Carbonate	1317-65-3	0 - 2
and/or Calcium Oxide	1305-78-8	0 - 5
and/or Barium Sulfate	7727-43-7	0 - 5
and/or Sulfur	7704-34-9	0 - 5
and/or Zinc Sulfide	1314-98-3	0 - 5
and/or Magnesium Oxide	1309-48-4	0 - 5
and/or Iron Oxide	1309-37-1	0 - 5
and/or Graphite	7782-42-5	0 - 5
and/or Iron Pyrite	12068-85-8	0 - 20
and/or Cryolite	15096-52-3	1 - 10
and/or Potassium Fluoroborate	14075-53-7	0 - 5

Section 4: First-aid Measures

<i>Inhalation:</i>	Inhalation may be the most common cause of overexposure. Large amounts of grinding dust will cause irritation of the nose, eyes and skin. Move from the area that has any fumes to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and transport to nearest medical facility for additional treatment.
<i>Ingestion:</i>	If grinding dust is swallowed, seek medical advice.
<i>Eye Contact:</i>	Immediately flush upper and lower eyelids with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persists, visit nearest medical facility for additional treatment.
<i>Skin Contact:</i>	Wash from skin with clean soap and water. Clean contaminated clothing before reuse.

NOTE: In all severe cases, contact physician immediately. Local telephone operators can provide number of regional poison control centre.

Section 5: Fire-fighting Measures

<i>Flammable:</i>	No
<i>Means of Extinction:</i>	Use appropriate media for surrounding fire.
<i>Auto-ignition Temperature:</i>	Not applicable
<i>Hazardous Combustion Products:</i>	None known
<i>Explosion Data Sensitivity to Mechanical Impact:</i>	Not applicable
<i>Explosion Data Sensitivity to Static Discharge:</i>	Not applicable
<i>Special Equipment:</i>	Not required
<i>Precautions for Fire Fighters:</i>	This product is not combustible; however, consideration must be given to the potential fire/explosion hazards from the base material being processed. Many materials create flammable/explosive dusts or turnings when machined or ground.

Section 6: Accidental Release Measures

<i>Protection Equipment:</i>	See section 8
<i>Emergency Procedures:</i>	Not applicable
<i>Leak or Spill Procedure:</i>	Pick up, sweep up or vacuum and place in a container for disposal. Minimize generation of dust. Notify authorities as required by local, regional and federal regulations.

Section 7: Handling and Storage

<i>Handling Procedures and Equipment:</i>	Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling and use, especially before eating, drinking or smoking. Refer to ANSI B7.1, <i>Safety Requirements for the Use, Care and Protection of Abrasive Wheels</i> , for additional information. Consider potential exposure to components of the base materials or coatings being ground. Refer to OSHA's substance specific standards for additional work practice requirements where applicable.
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Storage Requirements:

Store in accordance with ANSI B7.1; store in a cool, dry, low humid location.
Protect abrasive wheels from damage.

Incompatibilities:

None known

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

HAZARDOUS INGREDIENTS	CAS NUMBER	OSHA PEL (mg/m³)	ACGIH TLV (mg/m³)
Aluminum Oxide	1344-28-1	15(dust)	10
Silicon Carbide	409-21-2	15(dust)	10(inhalable)
Zirconium Oxide	1314-23-4	15	5, 10(STEL)
Cubitron	-	-	-
Titanium Oxide	13463-67-7	15(dust)	10
Cured Phenolic Resin	-	-	-
Woven Fibreglass	-	15(dust)	1 f/cc
Calcium Carbonate	1317-65-3	15(dust)	10
Calcium Oxide	1305-78-8	5	2
Barium Sulfate	7727-43-7	15(dust)	10
Sulfur	7704-34-9	-	-
Zinc Sulfide	1314-98-3	-	-
Magnesium Oxide	1309-48-4	15(dust)	10(inhalable)
Iron Oxide	1309-37-1	10	5
Graphite	7782-42-5	15(dust)	2(resp)
Iron Pyrite	12068-85-8	-	-
Cryolite	15096-52-3	2.5	2.5
Potassium Fluoroborate	14075-53-7	2.5	2.5

Engineering Controls:

General ventilation and local fume extraction must be adequate to minimize exposure to dust and maintain the concentration of contaminants within safe limits as defined above

Personal Protective Equipment:

Respiratory: Use NIOSH approved respirator if exposure limits are exceeded or where dust exposures are excessive. Consider the potential for exposure to components of the coatings or base material being ground in selecting proper respiratory protection. Refer to OSHA's specific standards for lead, cadmium, etc. where appropriate. Selection of respiratory protection depends on the contaminant type, form and concentration. Select and use respirators in accordance with OSHA 1910.134 and good industrial hygiene practice.

Hands: Cloth or leather gloves are recommended.

Eyes: Safety goggles or face shield over safety glasses with side shields.

Skin: Approved protection (ie./ welders gloves, apron, sleeves, jacket, etc.) should be worn to prevent injury from sparks and contamination of clothing.

Hearing: Hearing protection may be required and is recommended.

Section 9: Physical and Chemical Properties

Physical State:

Solid discs

Odor and Appearance:

Odorless black, brown or reddish colored solid wheels

Odor Threshold (ppm):

Not applicable

pH:

Not applicable

Melting Point:

Not applicable

Freezing Point:

Not applicable

Boiling Point:

Not applicable

Flashpoint:

Not applicable

Upper Flammable Limit (% by volume): Not applicable
Lower Flammable Limit (% by volume): Not applicable

Section 10: Stability and Reactivity

Chemical Stability: Stable
Possible Hazardous Reactions: None known
Conditions to Avoid: None known
Materials to Avoid (Incompatibilities): None known
Conditions of Reactivity: Not applicable
Hazardous Decomposition By-Products: Dust from grinding could contain ingredients listed in Section 2 and other, potentially more hazardous components of the base material being ground or coatings applied to the base material.
Hazardous Polymerization: Hazardous polymerization will not occur.

Section 11: Toxicological Information

Skin Contact: Not expected under normal conditions of use. Rubbing product across the skin may cause mechanical irritation or abrasions.
Skin Absorption: Not applicable
Eye Contact: Dust may cause eye irritation. Dust particles may cause abrasive injury to the eyes.
Inhalation: Dust may cause respiratory irritation.
Ingestion: None expected under normal conditions of use. Swallowing large pieces may cause obstruction of the gastrointestinal tract.
Effects of Acute Exposure: During use (grinding), coughing and shortness of breath may occur. May cause irritation to eyes.
Effects of Chronic Exposure: Long-term overexposure to respirable dust may cause lung damage (fibrosis) with symptoms of coughing, shortness of breath and diminished breathing capacity. Chronic effects may be aggravated by smoking. Prolonged overexposure to fluorides may cause a bone condition, fluorosis. Prolonged exposure to elevated noise levels during operations may affect hearing. A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being ground. Most of the dust generated during grinding is from the base material being ground and the potential hazard from this exposure must be evaluated.
Sensitization to Product: This material is not known to cause sensitization.
Carcinogenicity: None of the components is listed as a carcinogen or potential carcinogen by OSHA, NTP or IARC.
Reproductive Effects: None known
Toxicological Data: This product and its components are not acutely toxic. The only acute toxicity data available for the components are listed below:
Zinc Sulfide LD50 Oral rat >2 g/kg
LC50 Inhalation rat >5040 mg/m³/4 hr
LD50 Skin rat > 2 g/kg
Cryolite LD50 Oral rat >5g/kg

Section 12: Ecological Information

This product is not expected to be hazardous for the environment. No specific eco-toxicity data is available for this product.

Section 13: Disposal Considerations

NOTE: Always dispose of waste in accordance with local, 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.

Section 14: Transportation Information

This product is not subject to specific shipping criteria.

Section 15: Regulatory Information

<i>Canada WHMIS Classification:</i>	Not a controlled product. This product meets the definition of a "manufactured article" under the WHMIS regulations.
<i>California Proposition 65:</i>	<u>WARNING</u> - You create dust when you cut, sand, drill or grind materials such as wood, paint, cement, masonry or metal. This dust often contains chemicals known to cause cancer, birth defects or other reproductive harm.

Section 16: Other Information

<i>Preparation Date:</i>	18 January 2016
<i>Date of Last Revision:</i>	18 January 2016

This SDS format is in accordance with GHS. PowerWeld Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of PowerWeld. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made.