



Hilti (Canada) Corporation

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 Revision No.: 005
 Prep. Date: 01/21/2009
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MATERIAL SAFETY DATA SHEET

Product identifier: Abrasive Blades and Wheels
Product description / use: Resin-bonded abrasive grinding / cutting wheels.
Supplier: Hilti (Canada) Corporation, 6790 Century Avenue, Suite #300, Mississauga, Ontario L5N 2V8
Originator: Hilti, Inc., P. O. Box 21148, Tulsa, Oklahoma, USA 74121
Emergency number: Chem-Trec: 1 800 424 9300

INGREDIENTS INFORMATION

Ingredient	CAS Number	Max. % (wt.)	LC ₅₀ , (rat)	LD ₅₀ (rat)	TLV	STEL
Aluminum oxide**	01344-28-1	90	N/Av	>3600 mg/kg	1 mg/m ³ (R)	N/Av
Silicon carbide**	00409-21-2	90	N/Av	N/Av	N/Av	N/Av
Zirconium Alumina**	70692-95-4	90	N/Av	N/Av	5 mg/m ³ *	10 mg/m ³ *
Glass, fibrous or dust	65997-17-3	10	N/Av	N/Av	1 f/cc (RF)	N/Av
Iron Sulfide	12068-52-3	2	N/Av	N/Av	N/Av	N/Av
Cryolite	15096-52-3	3	N/Av	>5 g/kg	2.5 mg/m ³	N/Av

* - Based on elemental Zirconium

** - Metal cutting blades are primarily Aluminum Oxide or Zirconium Alumina while masonry blades are primarily Silicon Carbide.

Abbreviations: TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit. (R) = Respirable Fraction. (RF) = Respirable fiber. N/Av = Not available

PHYSICAL PROPERTIES

Appearance / Physical state:	Dark colored discs / Solid.	Odour:	None.
Specific gravity (at 20°C):	Not applicable.	Odour threshold:	Not applicable.
Vapour pressure (at 20°C):	Not applicable.	Vapour density:	Not applicable.
Evaporation rate:	Not applicable.	Boiling point:	Not applicable.
Freezing point:	Not applicable.	pH:	Not applicable.
Coefficient of H₂O / oil distrib:	Not applicable.	Solubility in water:	Not applicable.

FIRE AND EXPLOSION DATA

Flash point / Method:	Nonflammable.	Flammable limits:	Not applicable.
Conditions of flammability:	Not known.	Auto-ignition temperature:	Not applicable.
Means of extinction:	As appropriate for surrounding fire (e.g. Water, CO ₂ , Dry Chemical, Foam).		
Special fire fighting procedures:	None known. A NIOSH-approved self-contained breathing apparatus (SCBA) should be worn when fighting fires involving chemicals.		
Hazardous combustion products:	Not determined.		
Sensitivity to mechanical impact / static discharge:	Not susceptible to mechanical impact or to a static discharge.		

REACTIVITY DATA

Stability:	Stable.	Conditions of reactivity:	None known.
Incompatible materials:	None identified.		
Hazardous decomposition products:	Not applicable. Dusts may be generated during use. Do not exceed exposure limits.		

TOXICOLOGICAL PROPERTIES

Likely routes of exposure:	<input checked="" type="checkbox"/> None known <input type="checkbox"/> Skin contact <input type="checkbox"/> Skin absorption <input type="checkbox"/> Eye contact <input type="checkbox"/> Inhalation		
Exposure limits:	See "Ingredients" section above.		
Acute effects of exposure:	Dusts from materials being cut or from grinding can cause irritation to the nose, throat, and skin. When dusts are not controlled, breathing capacity can be affected leading to coughing, wheezing, and/or shortness of breath.		
Chronic effects of exposure:	Long-term overexposure to dusts can lead to respiratory impairment. Excessive noise levels can be generated during cutting / grinding operations. Chronic exposure to high noise levels can cause hearing damage / loss.		

Synergistic materials: None known.

FIRST AID MEASURES

Eyes: Flush with plenty of water. Do not rub the eye. **CAUTION:** If particles penetrate or otherwise become lodged / impaled in the eye, do not attempt to remove. Contact a physician immediately.

Skin: Wash with soap and water. after using and before eating or smoking.

Inhalation: Move victim to fresh air.

Ingestion: Not a likely route of exposure.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure

PREVENTIVE MEASURES

Engineering controls: General (natural or mechanically induced fresh air movements).

Eye protection: Safety goggles.

Skin protection: Leather or cloth work gloves.

Respiratory protection: None normally required. If ventilation is not adequate to control dusts generated while cutting or grinding, use a suitable NIOSH-approved dust/mist respirator.

Other: Hearing protection may be needed depending on nature of work being done and length of exposure. .

Handling procedures and equipment: For industrial use only. Keep out of reach of children. Use with adequate ventilation. Practice good hygiene; i.e., wash after using and before eating or smoking.

Storage requirements: Store in a dry area. Avoid storage in extreme temperature changes, especially below freezing. Blades should be stored flat.

Spill, leak or release: Not applicable.

Waste disposal: Not a regulated waste. Disposal with normal industrial waste is generally acceptable.

Special shipping instructions: Avoid temperature extremes. Keep from freezing.

REGULATORY INFORMATION

WHMIS classification: Not applicable. (This product is classified as a "Manufactured Article")

HMIS codes: Health 1, Flammability 0, Reactivity 0, PPE A (Goggles)

TDG shipping name: Not regulated.

PREPARATION INFORMATION / CONTACTS

Prepared by: Hilti, Inc., Tulsa, OK Date of Preparation: **Emergency phone number:** 1 800 424 9300
USA Jan. 21, 2009

Customer Service: Hilti (Canada) Corporation, Mississauga, Ontario; 1 800 363 4458

Health / Safety contacts: Hilti, Inc., Tulsa, OK USA; 1 800 879 6000, Jerry Metcalf (x3704)

Abbreviations used: **N/E** = None Established. **N/A** = Not Applicable. **N/Av** = Not Available. **(R)** indicates "as respirable fraction". **HMIS:** Hazardous Materials Identification System

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.