

SAFETY DATA SHEET

Zirconia Abrasive Flap Discs, 01/01/2016

Important Notice: Coated abrasives are inert products which do not create any risk when handled or stored. When used on grinding machines they require specific measures to protect the operators. During grinding operation, 90% or more of dust particulates come from the material being ground and, for wet grinding, from aerosols generated by the grinding fluid. Specific attention must therefore be given to the nature of the part and fluid, and the appropriate personal protection equipment must be used.

SECTION 1: Product Identification

1.1 Product Identifier

Zirconia Flap Discs

1.2 Product Uses

Abrasive for industrial and professional application. Grinding and finishing on all materials.

1.3 Supplier Information

Company: Virtual Machines Inc. a/o Extreme Abrasives

Address: 1110 Kamato Rd. Unit 10-11
Mississauga, ON
L4W 2P3
Canada

Phone: 905 282 1313

Fax: 905 282 1315

1.4 Emergency Telephone Number

SECTION 2: Hazard Identification

2.1 ClassificationCoated abrasives are not hazardous products as defined in EC Directive N 88/379 and according OSHA Hazard Communication Standard, 29 CFR 1910.1200.**2.2. Label elements**

Not applicable.

2.3. Other hazards

Not known.

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SECTION 3: Composition/Information on Ingredients

Ingredient	C.A.S. No	% by weight (optional)
BACKING - FIBREGLASS BOUND WITH RESIN	N/A	20-40
BACKING - REINFORCED NYLON (PLASTIC)	N/A	35-50
BACKING - ALUMINUM	N/A	35-50
ALUMINUM OXIDE Al ₂ O ₃	1344-28-1	15-30
ZIRCONIA ALUMINA ZrO ₂	1314-23-4	15-30
CRYOLITE (Na ₃ AlF ₆)	15096-52-3	0-15
CURED EPOXY ADHESIVE	N/A	15-20
COTTON OR POLY-COTON OR POLYESTER CLOTH	N/A	13-17

SECTION 4: First Aid Measures**4.1 Description of First Aid Measures****4.1.1 General Information**

NOT APPLICABLE WHEN COATED ABRASIVES ARE STORED OR NOT USED.

The following recommendations are basic safety rules for grinding operations. They must be followed in conjunction with the information appearing in the safety data sheets of the material being ground and grinding fluid.

4.1.2 Inhalation

Remove from exposure and seek medical attention if symptoms persist.

4.1.3 Skin Contact

No hazardous effect known.

4.1.4 Eye Contact

Remove from exposure and flush with clean water. If symptoms persist, seek medical attention.

4.1.5 Ingestion

No hazardous effect known.

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SECTION 5: Fire-Fighting Measures

NONE SPECIFIC

Water, powder, foam, sand, CO₂, etc. can all be used if compatible with operating conditions.

When there is thermal decomposition of the product wear protective clothing and breathing apparatus.

SECTION 6: Accidental Release Measures

NOT APPLICABLE

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

7.1.1 Protective Measures

Follow recommendations for PPE. Damaged discs can break apart during use and cause serious. Inspect discs for concentricity and damage prior to use. Replace if damaged

7.1.2 Advice on general occupation hygiene

No specific requirements.

7.2 Conditions for Safe Storage

Store coated abrasives in constant moderate temperature and humidity conditions. For detailed recommendations refer to the FEPA Safety Leaflet for Coated Abrasives.

SECTION 8: Exposure Control and Personal Protection

NOT APPLICABLE WHEN COATED ABRASIVES ARE HANDLED OR STORED

8.1 Control Parameters

Before use it is recommended to perform exposure assessment and use PPE accordingly. During grinding operations with coated abrasives, particles of dust come from the material being ground. The general maximum exposure limit for dust is 6 mg/m³. Use general ventilation and/or local exhaust ventilation to control airborne exposures to below relevant limits. Ensure that ventilation/exhaust or dust handling systems are adequate to working environment.

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In the case where materials are exposed to overheating use appropriate ventilation to maintain air borne particles below exposure guidelines.

When using coated abrasives, refer to the grinding machine instructions, and national rules and regulations. Refer also to the FEPA Safety Leaflet for Coated Abrasives also to OSHA 29 CFR 1910.134 or European Standard EN 149.

Keep exposure to the following components under surveillance. Also observe also the regional official regulations.

Substance	CAS-N°	Agency	Threshold limits
Cryolite	15096-52-3	OSHA	TWA (as dust): 2.5 mg/m ³
Zirconia Alumina	1314-23-4	OSHA	TWA (as dust): 15 mg/m ³
Aluminum Oxide	1344-28-1	OSHA	TWA (as dust): 15 mg/m ³
Fiberglass	N/A	OSHA	TWA (as dust): 15 mg/m ³

OSHA: United States Department of Labor – Occupational Safety and Health Administration

TWA: Time-Weighted-Average

8.2 Personal Protective Equipment

The following personal protective equipment should be used dependent on the operation and the material being ground.

8.2.1 Eye/Face Protection

Eye protection: Machine guarding and safety goggles or face shield. Refer to OSHA 29 CFR 1910.133.

Ear protection: Use of ear defenders or equivalent. Refer to OSHA 29 CFR 1910.95.

8.2.2 Skin Protection

Skin protection: Use of suitable protective clothing.

Hand protection: Use of protective gloves.

8.2.3 Respiratory Protection

Dust protection: Use of dust mask or OSHA approved respirator. Refer to the FEPA Safety Leaflet for Coated Abrasives and also to OSHA 29 CFR 1910.134 or European Standard EN 149.

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SECTION 9: Physical and Chemical Properties**9.1 Information on Basic Physical and Chemical Properties**

Physical State: Solid

Colour: Variable

Odour: May give off non-specific odour during use

pH: N/A

Change of physical state: N/A

Density: N/A

Bulk Density: N/A

Vapour Pressure: N/A

Flash Point: N/A

Viscosity: N/A

Solubility in H₂O: Not defined**9.2 Other Information****Physical Hazards:****Explosives**

NOT APPLICABLE

Flammable Gases

NOT APPLICABLE

Flammable Aerosols

NOT APPLICABLE

Oxidizing Gases

NOT APPLICABLE

Pressurized Gases

NOT APPLICABLE

Flammable Liquids

NOT APPLICABLE

Flammable Solids

NOT APPLICABLE

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Self-Reactive Substances and Mixtures

NOT APPLICABLE

Pyrophoric Liquids

NOT APPLICABLE

Self-Heating Substances

NOT APPLICABLE

Substances or Mixtures Which, in Contact with Water Emit Flammable Gases

NOT APPLICABLE

Oxidizing Liquids

NOT APPLICABLE

Oxides Peroxides

NOT APPLICABLE

Metal Corrosion

NOT APPLICABLE

SECTION 10: Stability and Reactivity

10.1 Reactivity and Chemical Stability

Coated abrasives are stable and non-reactive when handled or stored.

10.2 Possibility of Hazardous Reactions

If coated abrasives are used in accordance with instructions, no hazardous decomposition products are created.

10.3 Conditions to Avoid

Strong acids, bases, and oxidizing agents may modify the mechanical characteristics of the products and create safety hazards.

10.4 Hazardous decomposition products

At temperatures exceeding 250° C hazardous or toxic decomposition products may be generated.

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SECTION 11: Toxicological Information

NOT APPLICABLE WHEN HANDLED OR STORED

Based on experience gathered over many years, when properly used, coated abrasives have no adverse effects on health. Refer to the preliminary note about dust and airborne particles during use.

SECTION 12: Ecological information

Mobility: N/A

Persistence and Degradability: Not defined.

Bioaccumulative Potential: N/A

Ecotoxicity: N/A

SECTION 13: Disposal Considerations

After use, coated abrasives may be contaminated with hazardous materials (particles or cooling agents) and should be disposed of in accordance with local, regional and national regulations.

The material that was worked on could contaminate product and must be considered as a factor in the disposal method. Dispose product in a permitted industrial waste facility.

EPA Hazardous Waste Number (RCRA): Not regulated

SECTION 14: Transport

Coated abrasives are not dangerous products and have no specific rules for transportation and are not regulated per U.S. DOT, IATA or IMO.

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SECTION 15: Regulatory information

15.1 EC and OSHA Regulations

NONE, no specific marking required under the EC-Directive N 88/379 or OSHA.

15.2 National and Local Regulations

Refer to relevant texts.

SECTION 16: Other Information

NONE

Warning: The above indications are based on existing practice and do not constitute a guarantee. The laws and regulations must be strictly followed by the users and operators who remain responsible for the use of coated abrasives.

Issued by: Jovan Pajovic
Date: 01/01/2015