

Format by FEPA as per EC Directive 91/155 and ISO Standard 11014

**COMPANY:** **KWH Mirka Ltd**  
Address: FIN-66850 Jeppo  
Finland

**Date**  
28.04.2004

**AUTHORIZED PERSON:** **Mr. Johan Palmroos**

Position: Environmental manager

Phone No.: +358 20 760 2111

Fax No.: +358 20 760 2590

**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 the grinding operation 90 % or more of the particulates of the dust 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 of the fluid and the appropriate protection devices must be installed.

**1. PRODUCT IDENTIFICATION**  
**ROYAL**

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

**2.1 Abrasive**

- Synthetic Aluminium oxide
- Synthetic Silicon Carbide
- Zirconia Alumina (ZrO<sub>2</sub> - Al<sub>2</sub>O<sub>3</sub>)
- Others:

**2.2 Bond**

- Glue (natural material derived from plant or animal)
- Cured phenolic resin
- Cured urea / melamine resin
- Others:

**2.3 Fillers**

- Calcium carbonate
- Kaolin
- Cryolite (classification T, R20/22-48/23/25, S22, S37, S45)
- Others:

**2.4 Backing**

- Paper
- Cotton cloth
- Combination, paper cloth
- Cloth containing polyester
- Vulcanized fibre
- Others:

**2.5 Others:**

Stearate coating as supersize

**3. HAZARDS IDENTIFICATION**

Not applicable.

Coated abrasives are not dangerous products as defined in EC Directive No. 99/45.

**4. FIRST AID MEASURES**

Applicable when coated abrasives are in use on machines.

The following recommendations are basic rules during a grinding operation, they must be followed in conjunction with the information appearing in the Safety data sheets of the material ground and of the grinding fluid when used.

Dust inhalation:	Remove from exposure, seek medical advice if symptoms persist.
Eye:	Remove from exposure and flush with clean water. If symptoms persist seek medical advice.
Skin:	No hazardous effect known.
Ingestion:	No hazardous effect known.

**5. FIRE FIGHTING MEASURES**

None specific. Water, powder, foam, sand, CO<sub>2</sub>... can be used if compatible with operating conditions.

**6. ACCIDENTAL RELEASE MEASURES**

Not applicable.

**7. HANDLING AND STORAGE**

Follow recommendations for machines and national regulations.

Store coated abrasives in moderate constant temperature and humidity conditions.

For detailed recommendations refer to the FEPA Safety Leaflet for Coated Abrasives.

**8. EXPOSURE CONTROL AND PERSONAL PROTECTION**

Not applicable when coated abrasives are handled or stored.

During the grinding operation with coated abrasives particles of dust come from the material being ground. The general value for dust is max. 6 mg/m<sup>2</sup>.

When using coated abrasives, refer to grinding machines instructions and to the national rules.

Refer also to the FEPA Safety Leaflet for Coated Abrasives.

- 8.1 The following personal equipment should be used dependent on the operation and the material being ground:
- |                  |  |
|------------------|--|
| Eye protection:  | Machine guarding and safety goggles or face shield |
| Dust protection: | Use of dust mask                                   |
| Hand protection: | Use of barrier cream or protective gloves          |
| Ear protection:  | Use of ear defenders or equivalent                 |
| Skin protection: | Use of suitable protective clothing                |

- 8.2 Hygiene measures:  
No specific requirements

**9. PHYSICAL AND CHEMICAL PROPERTIES**

9.1	Physical state:	Solid
9.2	Colour:	Variable
9.3	Odour:	Not applicable (May give off non specific odour in use)
9.4	pH:	Not applicable
9.5	Change of physical state:	Not applicable
9.6	Density:	Not applicable
	Bulk density:	Not applicable
9.7	Vapour pressure:	Not applicable
9.8	Flash point:	Not applicable
9.9	Explosion properties:	Not applicable
9.10	Viscosity:	Not applicable
9.11	Solubility in water:	Not defined

**10. STABILITY AND REACTIVITY**

	Coated abrasives are stable and non reactive when handled or stored.	
10.1	Conditions to avoid: Not applicable	
10.2	Material to avoid: Strong acids, strong bases & strong oxidising agents may modify the mechanical characteristics of the products and create safety hazards when used on machines.	
10.3	Hazardous decomposition products: if coated abrasives are used in accordance with instructions no hazardous decomposition products are created.	

**11. TOXICOLOGICAL INFORMATION**

Not applicable when handled or stored.  
According to the experience gathered for many years, the abrasives, when properly used have no adverse effect on health, refer to the preliminary note about dust and aerosols of grinding fluid.

**12. ECOLOGICAL INFORMATION**

12.1	Mobility: Not applicable.
12.2	Persistence and degradability: Not defined.
12.3	Bioaccumulative potential: Not applicable
12.4	Ecotoxicity: Not applicable

**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 national regulations.

**14. TRANSPORT**

Coated abrasives are not dangerous products.

**15. REGULATORY INFORMATION**

No specific marking requirements under respective EC directives.

**16. OTHER INFORMATION**

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