Section 1 – Identification of the product and of the company / undertaking

1.1 Product identifier

Coated abrasives group K (Schleifmittel auf Unterlage Gruppe K)

PS20F; PS21F, FK; PS61F, FK; CS308Y; LS209X, XH, J, JF; CS310X, XF; CS311X, JF; CS320Y; CS323Y; CS333X, XF, J, JF; CS355X; CS411X, Y; CS412Y; CS415Y; CS417Y; CS448X; CS450; CS455X; CS460X; CS561; FS764ACT; CS565; CS612Y; CS710XF; CS811Y; CS912Y; CX533JF; QMC/QRC411; QMC/QRC412

1.2 Use of the products

Coated abrasives for the grinding / sanding of different kinds of materials

1.3 Details of the supplier

Company: KLINGSPOR Abrasives, Inc.

ADDRESS: PO Box 2367, 2555 Tate Blvd., S.E. Hickory, NC 28603-2367
Telephone: 828-322-3030
Fax: 828-326-0296
E-mail: technical@klingspor.com

1.4 Emergency telephone number

828-322-3030

Section 2 – HAZARDS IDENTIFICATION

2.1 Classification

Not applicable; not a hazardous substance or mixture.

Abrasives are articles and not dangerous substances or mixtures according to directive 1999/45/EC or Regulation (EC) N° 1272 / 2008.

See also section 8 and 16

2.2 Label elements

Not applicable. Abrasives are articles and not dangerous substances or mixtures and therefore no labeling is required according to directive 1999/45/EC or Regulation (EC) N° 1272 / 2008.

No labeling is required under GHS including precautionary statements as this is not a hazardous substance or mixture.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Not known.

Section 3 – Composition / information on ingredients

The products contain the following ingredients which are classified according to 67/548/EEC or Regulation (EC) Nr. 1272/2008 or for which a community occupational exposure limit exists:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryolite (sodium aluminum fluoride)</td>
<td>237-410-6</td>
<td>13775-53-6</td>
<td>01-211951565-43</td>
<td>1 – 9</td>
<td>Acute Tox. 4 Repr. 2 Aqua. Chr. 1</td>
<td>T; R48/23/25 Xn; R20 N; R51/53 R64</td>
</tr>
</tbody>
</table>

(For full text of H- and R- phrases see Section 16).

The ingredients above are classified according to Occupational Safety and Health Administration regulations (29 CFR 1910.1200 – Hazard Communication) or for which a community occupational exposure limit exists:

<table>
<thead>
<tr>
<th>Classification according to OSHA Regulation 29 CFR 1910.1200 (Hazard Communication)</th>
<th>GHS Hazard classification</th>
<th>Hazard statements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>Acute respiratory toxin</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Reproductive toxin</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Aquatic toxin (Chronic)</td>
</tr>
</tbody>
</table>

Section 4 – First aid measures

See also section 8 and 16

4.1 Description of first aid measures

Inhalation: Not possible, due to the form of the products

Eye contact: Not possible, due to the form of the products

Skin contact: No harmful effects know
Coated abrasives group K (Schleifmittel auf Unterlage Gruppe K)

Voluntary product information based on the format of a safety data sheet
For coated abrasives

Ingestion: Not likely, due to the form of the products; if necessary contact physician

Notes to physician: Not available.

4.2 Most important symptoms and effects, both acute and delayed
Not known.

4.3 Indication of any immediate medical attention and special treatment needed
Not relevant. Treat symptomatically.

Section 5 – Fire Fighting Measures

5.1 Extinguishing media
Extinguishing media: water, foam, sand, powder or CO₂ as appropriate for surrounding materials.

5.2 Special hazards arising from the products
Toxic fumes may occur. Use respiratory equipment.

5.3 Advice for fire fighters
Extinguishing media should be selected according to the surrounding area.

Section 6 – Accidental release measures
Not applicable.

Section 7 – HANDLING AND STORAGE

Follow instructions of grinding machine manufacturers and the relevant national regulations. In addition, observe the safety recommendations of the manufacturer.

Store abrasives in dry, frost-free conditions avoiding wide variations in temperature. Ensure they are properly protected and supported to prevent damage and distortion.
Coated abrasives should be stored at 18-22°C, 45-65 % relative humidity.

Copyright FEPA, 20 Avenue Reille F-75014 PARIS
Section 8 – Exposure controls / personal protection

8.1 Control parameters

Before grinding it is recommended to perform a risk assessment and to use personal protection equipment accordingly.

*Occupational exposure limit values and/or biological limit values*

Keep exposure to the following components under surveillance.
(Observe also the regional official regulations).

<table>
<thead>
<tr>
<th>Limit value type (country of origin)</th>
<th>Substance</th>
<th>EC-N°</th>
<th>CAS-N°</th>
<th>Occupational limit value</th>
<th>Peak limit</th>
<th>Source, remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cryolite</td>
<td>237</td>
<td>410-6</td>
<td>13775-53-6</td>
<td>2.5*</td>
<td>HSC, (flourides, inorganic as F)</td>
</tr>
</tbody>
</table>

*Valid for UK, other countries: observe national values (please see attachment "International Limit Values", page 7)

Note: Hazardous dust of the workpiece material may be generated during grinding and/or sanding operations.
National regulations for dust exposure limit values have to be taken into consideration as part of the job hazard assessment.

8.2 Exposure controls

8.2.1 Individual protection measures

8.2.1.1 Respiratory protection: Use respiratory protective equipment
(type depends on specific application and material being ground)

8.2.1.2 Hand protection: Wear protective gloves
(type depends on specific application and material being ground)

8.2.1.3 Eye protection: Wear protective goggles or face shield
(type depends on specific application and material being ground)

8.2.1.4 Hearing protection: Use hearing protection
(type depends on specific application and material being ground)
Voluntary product information based on the format of a safety data sheet
For coated abrasives

8.2.1.5. Body protection: Use protective clothing
(type depends on specific application and material being ground)

Section 9 – Physical and chemical properties

9.1 Information on basic physical and chemical properties

9.1.1 Physical state: solid
9.1.2 Colour: according to the type of product
9.1.3 Solubility in water: not measured

9.2 Other information
None

Section 10 – Stability and reactivity

10.1 Reactivity
Coated abrasives are stable when handled or stored correctly.

10.2 Chemical stability
No decomposition in normal use.

10.3 Possibility of hazardous reactions
No dangerous reaction known.

10.4 Conditions to avoid
Coated abrasives are stable when handled or stored correctly.

10.5 Incompatible materials
No dangerous reactions known.

10.6 Hazardous decomposition products
A temperatures exceeding 250°C, hazardous or toxic decomposition products may be generated.
Section 11 – Toxicological information

11.1 Information on toxicological effects

No toxicological effects if inhaled or swallowed or with eye or skin contact are known.

See also section 8.

Section 12 – Ecological information

12.1 Toxicity

No effects known.

12.2 Persistence and degradability

No biodegradable potentials known.

12.3 Bioaccumulative potential

No potentials known.

12.4 Mobility in soil

No potentials known.

12.5 Results of PBT and vPvB assessment

Not relevant.

12.6 Other adverse effects

No effects known.

Section 13 – Disposal considerations

13.1 Waste treatment methods

13.1.1 Product

Follow national and regional regulations.

O Due to the ingredients and proprieties disposal and nonhazardous waste (2000/532/EC) is possible if no hazardous materials are added to the abrasives. (EWC – Nr. 120121),
Voluntary product information based on the format of a safety data sheet
For coated abrasives

Due to the ingredients and properties disposal as hazardous waste (2000/532/EC) (EWC - Nr. 120120)

13.1.2 Packing

Follow national and regional regulations.

Section 14 – Transport information

**International transport**: Not classified as a dangerous good under transport regulations

**Land transport, USDOT**: Not classified as a dangerous good under transport regulations

**Sea transport, IMDG**: Not classified as a dangerous good under transport regulations

**Air transport, IATA/ICAO**: Not classified as a dangerous good under transport regulations

Section 15 – Regulatory information

15.1 Safety, health, and environmental regulations/legislation specific for the products

No specific labeling requirements under respective EC directives.

15.2 Chemical safety assessment

Not relevant.

Section 16 – Other information

Changes to previous versions

See sections 1 to 16.

**Literature and data sources**

- Transport regulations according to ADR, RID, and IATA.
Hazard statements referred to in Section 2 and 3

According to Regulation (EC) N° 1272/2008:

H – Phrases for cryolite

H 332 Harmful if inhaled.
H 372 May cause damage to organs (lungs, skeleton) to prolonged or repeated exposure.
H 362 May cause harm to breast-fed babies.
H 411 Toxic to aquatic life with long lasting effects.

According to Directive 67/548/EWC:

R – Phrases for cryolite

R 20 Harmful by inhalation.
R 48/23/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R 51/53 Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.
R 64 May cause harm to breast-fed babies.

According to United States Regulation OSHA 29 CFR 1910.1200:

<table>
<thead>
<tr>
<th>GHS Hazard Class</th>
<th>Hazard Statements</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Acute inhalation toxin</td>
<td>Inhalation of dusts and mists can be harmful.</td>
</tr>
<tr>
<td>2</td>
<td>Reproductive toxin</td>
<td>Suspected reproductive toxicant.</td>
</tr>
<tr>
<td>2</td>
<td>Aquatic toxin (Chronic)</td>
<td>Harmful / toxic to aquatic life for prolonged exposure.</td>
</tr>
</tbody>
</table>

International Limit Values *

Substance: Flouride (inorganic as F) CAS No. 16984-48-8

<table>
<thead>
<tr>
<th>Country</th>
<th>Limit value – Eight hours (mg/m³)</th>
<th>Limit value – Short term (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>2,5 inhalable aerosol</td>
<td>12,5 inhalable aerosol</td>
</tr>
<tr>
<td>Belgium</td>
<td>2,5 -</td>
<td></td>
</tr>
<tr>
<td>Canada-Ontario - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada-Quebec - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>2,5</td>
<td>5</td>
</tr>
<tr>
<td>European Union</td>
<td>2,5 -</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>2,5</td>
<td></td>
</tr>
<tr>
<td>Germany (AGS)</td>
<td>1 inhalable aerosol</td>
<td>4 inhalable aerosol (1)</td>
</tr>
<tr>
<td>Germany (DFG)</td>
<td>1 inhalable aerosol</td>
<td>4 inhalable aerosol</td>
</tr>
<tr>
<td>Hungary</td>
<td>2,5</td>
<td>10</td>
</tr>
<tr>
<td>Ireland</td>
<td>2,5 -</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>2,5 -</td>
<td></td>
</tr>
<tr>
<td>Japan - -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>2,5 -</td>
<td></td>
</tr>
<tr>
<td>New Zealand - -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Copyright FEPA, 20 Avenue Reille F-75014 PARIS
Voluntary product information based on the format of a safety data sheet
For coated abrasives

<table>
<thead>
<tr>
<th>Country</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>1</td>
</tr>
<tr>
<td>Singapore</td>
<td>2.5 -</td>
</tr>
<tr>
<td>South Korea</td>
<td>-</td>
</tr>
<tr>
<td>Spain</td>
<td>2.5 -</td>
</tr>
<tr>
<td>Sweden</td>
<td>2 -</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1 inhalable aerosol -</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>-</td>
</tr>
<tr>
<td>USA – NIOSH</td>
<td>-</td>
</tr>
<tr>
<td>USA – OSHA</td>
<td>2.5 -</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.5 -</td>
</tr>
</tbody>
</table>

Remarks:
- European Union: Indicative Occupational Exposure Limit Values (2,3) and Limit Values for Occupational Exposure (4) (for references see bibliography)
- Germany (AGS): (1) 15 minutes average value
- Germany (DFG): STV 15 minutes average value

*IFA / GESTIS International limit values for chemical substances (Stoffdatenbank, Internationale Grenzwerte für chemische Substanzen)

The above information is based on our current standard of knowledge and does not constitute any warranty or conditions of this product. The information does not form part of any contractual agreement. It remains the end user’s responsibility to adhere to existing laws and regulations.

Issued by: Laboratory
Contact: Dr. Irene Bock, Andrea Hangg-Krenzer

CAUTION: Intentional misuse of this chemical product, as with any industrial chemical in contact with the body, can be harmful or fatal. This includes such things as deliberately breathing, placing in mouth, swallowing, placing on skin, or any other body contact, or repeated or continuous contact.

KLINGSPOR Schleiftechnologie this information in good faith, but makes no representation as to its comprehensiveness or its accuracy. This document is offered as a guide to a trained person, for appropriate precautionary handling. Persons using the product and receiving the information must exercise independent judgment in determining the appropriateness of the use and the safety information for their particular purpose.

Copyright FEPA, 20 Avenue Reille F-75014 PARIS