



FEDERATION EUROPEENNE DES
FABRICANTS DE PRODUITS ABRASIFS

EC – Material Safety Data Sheet
**Aluminium Oxide (A), Silicon Carbide
(SiC) - Resinoid bond (B, BF) -**
Version/Date: 09.09.2020



Page 1 von 6

**MATERIAL SAFETY DATA SHEET FOR INORGANIC BONDED ABRASIVES -
- Formatted by FEPA as per EC Directive 91/155/EG and ISO Standard 11014 -**

1. Identification of Product and Company

1.1 Product Name:

Grinding tools with resinoid bond

1.2 Application:

Abrasive tool for grinding of various materials

1.3 Company identification:

KREBS & RIEDEL Schleifscheibenfabrik GmbH & Co KG
Bremer Straße 44
34385 Bad Karlshafen
Telefon: 05672 184 0
Telefax: 05672 184 218
E-mail: mail@krebs-riedel.de

1.4. Emergency telephone number:

+49 551 19240

2. Composition / Information on Ingredients

The product typically contains the following ingredients:

	Name	CAS	EG No.(ELINCS/EINECS)	Concentration in %
1	Aluminium Oxide	1344-28-1	215-691-6	0-95
or/and				
2	Silicon Carbide	409-21-2	206-991-8	0-95
or/and				
3	Zirconia alumina	68955-26-0	215-227-2	0-50
4	Phenolic resin (cured)	9002-35-4	-	5-25
with/ without				
5	Fibre glass	-	-	0-15
and				
6	Fillers	-	-	0-30
thereof				
1	Cryolite	15096-52-6	237-410-6	0-14
2	Calcium carbonate	1317-65-3	215-279-6	0-8
3	Manganese-II-chloride	7773-01-05	231-869-6	0-6
4	Zinc sulphide	1314-98-3	215-251-3	0-15

Bremer Straße 44 • 34385 Bad Karlshafen • Telefon: +49 (0)5672 184 0 • Telefax: +49 (0)5672 184 218 • mail@krebs-riedel.de • www.krebs-riedel.de

KREBS & RIEDEL Schleifscheibenfabrik GmbH & Co. KG, Sitz Bad Karlshafen Amtsgericht Kassel, HRA 12042
Komplementär K&R Schleifscheibenfabrik Verwaltungsgesellschaft mbH, Sitz Bad Karlshafen Amtsgericht Kassel, HRB 9000

Geschäftsführer:
Jost Riedel; Dipl.-Ing. Jörg Dinkel

KUE-502.odt



FEDERATION EUROPEENNE DES
FABRICANTS DE PRODUITS ABRASIFS

EC – Material Safety Data Sheet
**Aluminium Oxide (A), Silicon Carbide
(SiC) - Resinoid bond (B, BF) -**
Version/Date: 09.09.2020



Page 2 von 6

2. Composition / Information on Ingredients

5	Cubic pyrite	1309-36-0	215-167-7	0-15
6	Wollastonite	13983-17-0	237-772-5	0-20
7	Ferric oxide	1309-37-1	215-168-2	0-5

Of these ingredients are in accordance with the following products. 67/548 EEC and 99/45 EC to be labeled:

	Name	CAS	EG No. (ELINCS/EINECS)	concentration range	classification	R-Phrases
1	Cryolite	15096-52-3	237-410-6	0-14	T;N;Xn	R 20/22 R 48/23/25 R 51/53
2	Manganese-II- chloride	7773-01-05	231-869-6	0-6	Xn	R 22

3. Hazards Identification

Not applicable.

Abrasives are not dangerous substances or preparations as defined in EC directive No 99 / 45 EG.

See also: Sections 8 and 16.

4. First Aid Measures

See also: Sections 8 and 16.

Inhalation: not possible because of the shape of the product

Eye contact: not possible because of the shape of the product

Skin contact: no harmful effects known

Ingestion: not probably because of the shape of the product

If necessary contact physician

5. Fire Fighting Measures

Hazardous fumes may occur. Respiratory protective equipment.

Extinguishing Media:

Water, dry chemical, foam, sand, CO₂ as appropriate for surrounding materials.



FEDERATION EUROPEENNE DES
FABRICANTS DE PRODUITS ABRASIFS

EC – Material Safety Data Sheet
**Aluminium Oxide (A), Silicon Carbide
(SiC) - Resinoid bond (B, BF) -**
Version/Date: 09.09.2020



Page 3 von 6

6. Accidental Release Measures

Not applicable.

7. Handling and Storage

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

8. Exposure Control / Personal Protective Equipment

Before grinding risk assessment should be performed and individual protection measures adopted accordingly

8.1. Exposure limits

Keep limits of the following components under surveillance

Observe official regulations for dust)

	Name	CAS	EG No.	Concentration limits (daily average value)
1	Aluminium Oxide	1344-28-1	215-691-6	Observe official regulations for dust (e.g. TWA: 10mg/m ³ , OEL: 6 mg/m ³ , see section 16)
2	Silicon Carbide	409-21-2	209-991-8	Observe official regulations for dust (e.g. TWA: 5 mg / m ³ TWA: 3 mg / m ³ respirable and 10mg / m ³ respirable dust for SiC (fiber-free) , see section 16)
3	Zirconia alumina	68955-26-0	215-227-2	Observe official regulations for dust (e.g. TWA: 10mg/m ³ , OEL: 6 mg/m ³)
4	Phenolic resin cured	9002-35-4	-	not known
5	Fibre glass	-	-	not known
6	Cryolite	15096-52-6	237-410-6	Observe official regulations for dust (e.g. TWA: 2,5mg/m ³ (als F), OEL: 2,5 mg/m ³)
7	Calcium carbonate	1317-65-3	215-279-6	Observe official regulations for dust (e.g. OEL: 6 mg/m ³)
8	Manganese-II-chloride	7773-01-05	231-869-6	Observe official regulations for dust (e.g. OEL: 6 mg/m ³)
9	Zinc sulphide	1314-98-3	215-251-3	not known
10	Cubic pyrite	1309-36-0	215-167-7	not known
11	Wollastonite	13983-17-0	237-772-5	Observe official regulations for dust (e.g. OEL: 6 mg/m ³)



FEDERATION EUROPEENNE DES
FABRICANTS DE PRODUITS ABRASIFS

EC – Material Safety Data Sheet
**Aluminium Oxide (A), Silicon Carbide
(SiC) - Resinoid bond (B, BF) -**
Version/Date: 09.09.2020



Page 4 von 6

12	Ferric oxide	1309-37-1	215-168-2	Observe official regulations for dust (e.g. TWA: 5 mg / m ³ (dust and smoke as femak: 3 mg / m ³ respirable fraction and 10 mg / m ³ respirable fraction)
----	--------------	-----------	-----------	---

Note: Hazardous dust of workpieces material may be generated during grinding and/or sanding operation

8.2. Exposure control and limitations

8.2.1. Exposure control and limitations of the work environment

Observe official regulations for dust

8.2.1.1. Respiratory protection:

Use respiratory 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 equipment (type depends on specific application and material being ground)

8.2.1.5. Body protection:

Use protective clothing (type depends on specific application and material being ground)

9. Physical and Chemical Properties

9.1	Physical state:	solid
9.2	Color	brown, black
9.3	Solubility in water:	not soluble

10. Stability and Reactivity

Stability:

Inorganic bonded abrasives are stable and undergo no reaction when handled or stored

Reactivity:

10.1 Conditions to avoid:

No decomposition when in normal use

10.2 Materials to avoid:

No dangerous chemical reactions known

10.3 Hazardous decomposition products:

At temperatures above 250° C hazardous or toxic decomposition products

11. Toxicological Information

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



FEDERATION EUROPEENNE DES
FABRICANTS DE PRODUITS ABRASIFS

EC – Material Safety Data Sheet
**Aluminium Oxide (A), Silicon Carbide
(SiC) - Resinoid bond (B, BF) -**
Version/Date: 09.09.2020



Page 5 von 6

See also: section 8

12. Ecological Information

12.1	Ecotoxicity:	no effects known
12.2	Mobility:	no potentials known
12.3	Persistence and degradability:	no biodegradable potentials known
12.4	Bioaccumulative potential:	no potentials known
12.5	Other hazardous effects:	no effects known

13. Disposal Considerations

13.1. Product:

National and local regulations have to be observed.

Due to its ingredients and properties disposal as non hazardous waste (2000/532/EC) is possible, if no hazardous materials have been added to the abrasive in course of its use. (EWC - SN 120121),

13.2. Packing:

National and local regulations have to be observed.

14. Transport Information

The product is not affective by international regulations on the transport of dangerous goods

15. Regulatory Information

No specific marking requirements under relevant EC directives

16. Other Information

Reserach conducted at Institute for Hygiene and Occupational Medicine (University Essen) showed no toxic or cancer inducing properties for aluminium oxide. Aluminium oxide was chemically inert.

The following phrases have to be observed.

R – 20/22

Harmful by inhalation and if swallowed

R – 22

Harmful if swallowed



FEDERATION EUROPEENNE DES
FABRICANTS DE PRODUITS ABRASIFS

EC – Material Safety Data Sheet
**Aluminium Oxide (A), Silicon Carbide
(SiC) - Resinoid bond (B, BF) -**
Version/Date: 09.09.2020



Page 6 von 6

R 48/23/24/25

Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed

R – 51/53

Toxic to aquatic organisms, may cause long-term adverse effects

The above information is based on our current state of knowledge and does not constitute any warranty of properties of the product. This information is not part of any contractual agreement. It remains the user's responsibility to adhere to existing laws and regulations.

Issued by:

Product Manager Resin Bonded Products

Contact person:

Mr. Frank Borchert

Telephone:

+49 (0)5672 184 271

Mail:

borchert@krebs-riedel.de