



**HOFFMANN
ELEKTROKOHLE**

EU - MATERIAL SAFETY DATA SHEET

(according to 91/155/EWG)

Trade name: SK85Cu; SK85ACu; SK95Cu; SK01Cu; SK01ACu
Hardcarbon material for sliding strips on panto-graph, subway, trolley's.

Made:	01.06.2007	Change
Reviewed:	02.06.2007	Airborne dust 1mg/m ³ (Copper)
Printed:	25-Nov-09	

1 Identification of substances:

	Product detail:	
1.1	Trade name:	SK85Cu; SK85ACu; SK95Cu; SK01Cu; SK01ACu
1.2	Manufacturer/Supplier:	HOFFMANN & Co Elektrokohle AG Au 62 A-4823 Steeg a.H. AUSTRIA / EUROPE
1.3	Emergency information:	0043-6135-400

2 Composition/Data of components:

2.1	Chemical characterization:	Hard carbon and Electro Graphite, impregnated with Copper.
2.2	CAS-Number:	N/A
2.3	Dangerous components:	None

3 Hazards identification:

3.1	Hazard designation:	None
3.2	Information pertaining to particular for man:	None
3.3	Information pertaining to particular for environment:	None



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4 First aid measures:

4.1	General information:	No special measures required
4.2	After inhalation:	Seek medical treatment in case of complaints
4.3	After swallowing:	Seek medical treatment in case of complaints
4.4	After skin contact::	No special measures required
4.5	After eye contact:	No special measures required
4.6	Information for the doctor:	Show this material safety data sheet.

5 Fire fighting measures:

5.1	Suitable media:	Incombustible product
5.2	Unsuitable media:	Incombustible product
5.3	Special exposure hazards:	Incombustible product
5.4	Special protective equipment for fire fighters:	N/A
5.5	Other Information:	For smoke/flame classification see subject 16

6 Accidental release measures:

6.1	Personal precautions:	No special measures necessary
6.2	Measures for environmental protection:	No special measures necessary
6.3	Measures for cleaning / collecting:	No special measures necessary

7 Handling and storage:

7.1	Handling:	Grind dust combined with air can form an explosive mixture.
7.2	Storage:	No special measures necessary



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8 Exposure controls and personal protection:

8.1	Recommended engineering controls:	None
8.2	Components with limit values that require monitoring at workplace:	When grinding take care of the exposure limit of 1mg/m ³ for airborne dust (TRGS 900 for Copper).
8.3	Personal protection:	Not necessary
8.3.1	Respirator protection:	Not necessary
8.3.2	Hand protection:	Not necessary
8.3.3	Eye protection:	Not necessary
8.3.4	Body protection:	Not necessary
8.3.5	Hygienic measures:	Not necessary

9) Physical and chemical properties:

Form	Solid strips
Colour	Black - Gray
Odour	None
pH-value	None
Melting point/range	Carbon sublimates at >3000°C, impregnant melts at 1050-1100°C
Boiling point/range	None
Flash point	N/A
Ignition temperature:	>400°C
Decomposition temperature	None
Danger of explosion	None
Density	2,50-4,00g/cm ³
Apparent density	2,00-2,40g/cm ³
Solubility in water	Insoluble



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10 Stability and reactivity:

10.1	Dangerous reactions:	No dangerous reactions known
10.2	Conditions to be avoided:	None
10.3	Dangerous products of decomposition's:	No dangerous products known
10.4	Other information:	None

11 Toxicological information:

11.1	Acute toxicity:	Hard carbon and Electro graphite is a none toxic product
11.2	Other information:	When grinding take care of the exposure limit of 1mg/m³ for airborne dust (TRGS 900 for Copper).

12 Ecological information:

12.1	General notes:	Carbon is ecological harmless.
12.2	Other information:	None

13 Disposal considerations:

13.1	Product:	Dispose in safe manner according with local regulations.
13.2	Packaging:	Dispose in safe manner according with local regulations.

14 Transport information:

14.1	Precautions / Regulations:	No dangerous product according to international transport regulations.
14.2	Other information:	None



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15 Regulations:

15.1	Markings according to EU guidelines:	The product is not classified according with EU directives of hazardous materials
15.2	Dangerous components:	None
15.3	R-phrases:	None
15.4	S-phrases:	None
15.5	Other information:	At grinding take care of the exposure limit of 1mg/m³ for airborne dust (TRGS 900 for Copper).

16 Other information:

Material is conform to the regulations EU-D 2000/53/EC ("ELV") and EU-D 2002/95/EC ("RoHS") according to "WEEE - Waste of Electrical and Electronic Equipment" (EU-D 2002/96/EC)

Determination of smoke classification according NF F 16-102

Test	Classification
Smoke density (NF X 10-702) and Toxicity (NF X70-100)	F0

Determination of flame classification according NF F 16-102

Test	Classification
Oxygen index (OI) according NF T 51-071)	>99,8%
Glow wire flammability test	IO

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.