

46049 (Oberhausen			
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1 Identif	fication of the substance	/ preparation and of the company		
1.1 Pro	oduct identifier			
		Haceram Fibre products:		
		fibers, yarns, twists, webbings, packings, boards	, ropes, sle	eves,
		fabrics, (fibre)needle mats, paper		
		- with/without chromium steel/V4A-fortification		
		- with/without glass-yarn reinforcement		
		- with/without graphitization		
		- with/without coating with aluminium sheet meta	l foil.	
		aluminium vaporized PES-/PET-foil, self adhesiv	-	
1.2 Re	elevant identified uses of	the substance or mixture and uses advised against		
1.2.1 Re	elevant uses			
		Heat protection and isolating product (SU 3; PROC 1, 5, 21,23,24)	
1.2.2 Us	es advised against			
		None known.		
1.3 De	etails of the supplier of the	e safety data sheet		
Co	mpany	HKO Isolier- und Textiltechnik GmbH		
		Zum Eisenhammer 54		
		46049 Oberhausen / GERMANY Phone: 0208-85 99 40		
		Fax: 0208-85 99 470		
		Homepage: www.hko.de E-mail: technik@hko.de		
Ad	Idress enquiries to			
	chnical information	technik@hko.de		
Sat	fety Data Sheet	sdb@chemiebuero.de		
1.4 En	nergency phone			
		+49 (0) 89-19240 (24h) (english)		

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Carc. 1A, H350i

Classification according to conversion table Annex VII 1272/2008/EC

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

T, R 49

2.2 Label elements

Hazard symbols	Toxic
Contains:	Refractory Ceramic Fibres
R-phrases	R 49: May cause cancer by inhalation.
S-phrases	 S 53: Avoid exposure - obtain special instructions before use. S 22: Do not breathe dust. S 24/25: Avoid contact with skin and eyes. S 38: In case of insufficient ventilation, wear suitable respiratory equipment. S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Special labelling	Only for industry consumers.



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2.3	Other hazards			
	Physico-chemical hazards	See chapter 10.		
	Human health dangers	See chapter 11.		
	Environmental hazards	No particular hazards known.		
	Other hazards	none		
B Co	mposition / Information on ingred	lients		
.1	Substances			
		The product in question is a mixture.		
.2	Mixtures			
	Range [%] Substance			
	85 - 100 Refractory Ceramic	Fibres		
	EU-INDEX: 650-01	7-00-8		
	GHS/CLP: Carc. 1	B, H350		
	EEC: T, R 49			
	Comment on component parts	For the wording of the listed risk phrases refer to section 16. SVHC (Candidate List of Substances of Very High Concern for auth CAS - Refractory Ceramic Fibres	norisation) $\geq 0, -$	1%
Fir	st aid measures			
.1	Description of first aid measures			
	General information	Change soaked clothing.		
	Inhalation	Ensure supply of fresh air.		
		Supply with medical care.		
	Skin contact	In case of contact with skin wash off immediately with soap and wat	ter.	
		Consult a doctor if skin irritation persists.		
	Eye contact	In case of contact with eyes rinse thoroughly with plenty of water an	nd seek medica	I advice.
	Ingestion	Rinse out mouth and give plenty of water to drink.		
.2	Most important symptoms and e	ffects, both acute and delayed		
		No informations available.		
2	Indication of any immediate med	ical attention and special treatment needed		
1.3				
	-	Treat symptomatically.		
.ა		Treat symptomatically. Forward this sheet to the doctor.		
_	e-fighting measures			
5 Fir				
i Fir	e-fighting measures Extinguishing media Suitable extinguishing media	Forward this sheet to the doctor. Product itself is non-combustible. Fire extinguishing method of surro	ounding areas	must be
5 Fir	Extinguishing media	Forward this sheet to the doctor.	ounding areas	must be
5 Fir	Extinguishing media Suitable extinguishing media Extinguishing media that must not be used	Forward this sheet to the doctor. Product itself is non-combustible. Fire extinguishing method of surro considered. none	ounding areas	must be
Fir	Extinguishing media Suitable extinguishing media Extinguishing media that must not	Forward this sheet to the doctor. Product itself is non-combustible. Fire extinguishing method of surro considered. none	ounding areas	must be
5 Fir .1	Extinguishing media Suitable extinguishing media Extinguishing media that must not be used	Forward this sheet to the doctor. Product itself is non-combustible. Fire extinguishing method of surro considered. none substance or mixture	ounding areas	must be
5 Fir 5.1 5.2	Extinguishing media Suitable extinguishing media Extinguishing media that must not be used Special hazards arising from the	Forward this sheet to the doctor. Product itself is non-combustible. Fire extinguishing method of surro considered. none substance or mixture	ounding areas	must be
4.3 5 Fir 5.1 5.2	Extinguishing media Suitable extinguishing media Extinguishing media that must not be used Special hazards arising from the	Forward this sheet to the doctor. Product itself is non-combustible. Fire extinguishing method of surro considered. none substance or mixture Unknown risk of formation of toxic pyrolysis products.		

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6 Ao	ccidental release measures			
6.1	Personal precautions, protective	equipment and emergency procedures Avoid dust formation. Use breathing apparatus if exposed to dust. Do avoid any (skin) contact with the product.		
6.2	Environmental precautions	not applicable		
6.3	Methods and material for contair	Take up mechanically. Avoid production of dust. Use water for binding the dust. Vacuum up spilled product with vacuum cleaner for carcinogenic Dispose of absorbed material in accordance within the regulation		
6.4	Reference to other sections	See Chapter 8+13		
7 Ha	andling and storage			
7.1	Precautions for safe handling	Avoid the formation and deposition of dust. Provide vacuuming if dust raised. Suitable industrial vacuum cleaners or central vacuuming equipm up dust. Dust deposits that cannot be avoided must be taken up regularly With mechanical processing however fibers can be set free. No special measures necessary.		d for taking
7.2	Conditions for safe storage, inclu		s or people autho	prized by
7.3	Specific end use(s)	See product use, Chapter 1.2		
8 E>	cposure controls / personal protec	tion		
8.1	Control parameters			

Ingredients with occupational

exposure limits to be monitored (GB)

 Range [%]
 Substance / WEL: Workplace exposure limit

 85 - 100
 Refractory Ceramic Fibres / - ppm, - mg/m³, 2 fibres/millilitre

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8.2	Exposure controls	
	Additional advice on system design	Ensure adequate ventilation on workstation. Using suitable discharges or exhaust ventilation.
	Eye protection	Tightly fitting goggles.
	Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. Leather (EN 388).
	Skin protection	Long-sleeved work clothes.
	Other	Avoid contact with eyes and skin. Do not inhale dust. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.
		Use barrier skin cream. Contaminated clothing should be changed and stored in a quarantined area until disposed of as hazardous waste.
	Respiratory protection	Respiratory protection in the case of dust formation. Short term: filter apparatus, filter P3. If ventilation insufficient, wear respiratory protection.
	Thermal hazards	No informations available.
	Delimitation and monitoring of the environmental exposition	not determined

9 Physical and chemical properties

Information on basic physical and chemical properties 9.1

Form	solid in different forms
Color	various
Odor	odourless
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidizing properties	no
Vapour pressure [kPa]	not applicable
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	insoluble
Partition coefficient [n-octanol/water]	not applicable
Viscosity	not applicable
Relative vapour density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not determined
Autoignition temperature [°C]	not applicable
Decomposition temperature	not applicable
Other information	
	No informations available.
tability and reactivity	
	Color Odor Odour threshold pH-value pH-value [1%] Boiling point [°C] Flash point [°C] Flammability [°C] Lower explosion limit Upper explosion limit Oxidizing properties Vapour pressure [kPa] Density [g/ml] Bulk density [kg/m³] Solubility in water Partition coefficient [n-octanol/water] Viscosity Relative vapour density determined in air Evaporation speed Melting point [°C] Autoignition temperature [°C] Decomposition temperature

10.1 Reactivity

No hazardous reactions known.

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10.2	Chemical stability			
		Stable under normal ambient conditions (ambient temperature).		
40 -				
10.3	Possibility of hazardous reactions			
		No hazardous reactions known.		
10.4	Conditions to avoid			
		No informations available.		
10.5	Incompatible materials			
10.0		No informations available.		
4 - -				
10.6	Hazardous decomposition produce			
		No hazardous decomposition products known.		
11 T	oxicological information			
11.1	Information on toxicological effect	cts		
	Acute toxicity			
	Contana and demonstrate the			
	Serious eye damage/irritation	not determined		
	Skin corrosion/irritation Respiratory or skin sensitisation	not determined not determined		
	Specific target organ toxicity —	not determined		
	single exposure			
	Specific target organ toxicity — repeated exposure	not determined		
	Mutagenicity	not determined		
	Reproduction toxicity	not determined		
	Carcinogenicity	Classified 2B by IARC. Classified 2 by NTP.		
	General remarks	Contains fibres with diameter below 3 micrometers. The filament Fiber abrasion can cause mechanical skin irritation.	t is breathable (IAR	C).
		The product was classified on the basis of the calculation proceed directive.	dure of the preparat	tion
12 E	cological information			
12.1	Toxicity			
12.2	Persistence and degradability			
	Behaviour in environment	not applicable		
	compartments	not oppliaghle		
	Behaviour in sewage plant Biological degradability	not applicable not applicable		
12.3	Bioaccumulative potential			
		No informations available.		
12.4	Mobility in soil			
	-	No informations available.		
17 5	Posults of PPT and VPVP assess	mont		
12.3	Results of PBT and vPvB assess	No informations available.		

12.6 Other adverse effects

The product is insoluble in water. Can be separated out mechanically in purification plants. HKO

HIKO HEAT Protection

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13 Disposal considerations					
13.1 Waste treatment methods	Coordinate the waste disposal with the national authorities.				
Product					
	Coordinate disposal with the authorities if necessary.				
Waste no. (recommended)	170603* 101299				
Contaminated packaging					
	Uncontaminated packaging may be taken for recycling.				
Waste no. (recommended)	150101 150110*				
14 Transport information					
14.1 UN number					
	See point 14.2 in accordance with UN shipping name				
14.2 UN proper shipping name					
Classification according to ADR	NO DANGEROUS GOODS				
Classification according to IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"				
Classification according to IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"				
14.3 Transport hazard class(es)					
	See point 14.2 in accordance with UN shipping name				
14.4 Packing group					
	See point 14.2 in accordance with UN shipping name				
14.5 Environmental hazards					
	See point 14.2 in accordance with UN shipping name				
14.6 Special precautions for user					
····	Relevant information under points 6 to 8.				

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

15 R	egulatory information		
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture		
	EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC	
	TRANSPORT-REGULATIONS	DOT-Classification, ADR (2011); IMDG-Code (2011, 35. Amdt.); IATA-DGR (2011).	
	NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4	
15.2	Chemical safety assessment		
		Chemical safety assessments for substances in this mixture were not carried out.	
16 O	ther informations		
	R-phrases (Chapter 03)	R 49: May cause cancer by inhalation.	
	Observe employment restrictions for people	yes	

GENERAL REVIEW
not applicable
not determined