

Non-hazardous material safety data sheet for

Chrome Alumina

This generic SDS is provided by LKAB Minerals to give information to assist with material handling of the products listed which are not classified as hazardous under the GHS and / or the CLP regulations.

SECTION 1: Identification of the substance/mixture of the company/undertaking

1.1 Product identifier

Product name:	Chrome Alumina
REACH registration number:	01-2119529248-35
CAS number:	1344-28-1
EC number:	215-691-6

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses:	Refractory material, abrasive
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1.3 Details of the supplier of the safety data sheet

LKAB Minerals Ltd, Flixborough Industrial Estate, Flixborough, North
Lincolnshire DN15 8SF UK
sds@lkabminerals.com

1.4 Emergency telephone number of supplier

LKAB Minerals AB (Sweden)	+46 771 760 400
LKAB Minerals Asia Pacific Ltd (Hong Kong)	+852 2827 3000
LKAB Minerals BV (Netherlands)	+31 168 388500
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LKAB Minerals Tianjin (China)	+86 22 2435 1706

Hours of operation:	09.00 – 16.00 (local business hours)
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008):	Physical and chemical hazards: not classified
	Human health: not classified
	Environment: not classified

The full text for all R-phrases and hazard statements are displayed in section 16.

2.2 Label elements

Label in accordance with (EC) No. 1272/2008 No pictogram required.

2.3 Other hazards

This product does not contain any PBT or vPvB substances.

When water is added, the product may react with a number of metals forming hydrogen gas, which may form explosive vapour/air mixtures.

SECTION 3: Composition/information on ingredients

3.1 Substances

Product / ingredient name	%	CAS No	EC No	Classification
				Regulation (EC) No. 1272/2008 [CLP]
Aluminium Oxide	82 - 95	1344-28-1	215-691-6	Not classified
Chromium (III) Oxide	5 – 18	1308-38-9	215-160-9	Not classified

The full text for all R phrases and hazard statements are displayed in section 16.

REACH Registration number: 01-2119529248-35

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion:	Rinse mouth thoroughly. Get medical attention if any discomfort continues.
Skin contact:	Wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact:	Make sure to remove any contact lenses from the eyes before rinsing. Rinse eye with water immediately. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	No specific symptoms noted.
Ingestion:	No specific symptoms noted.
Skin contact:	No specific symptoms noted.
Eye contact:	No specific symptoms noted.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Fire fighting measures

5.1 Extinguishing media	This product is not flammable. Use fire extinguishing media appropriate for surrounding materials.
5.2 Special hazards arising from the substance or mixture	
Hazardous combustion products:	None under normal conditions
5.3 Advice for firefighters	
Special fire fighting procedures:	No specific fire fighting procedures given

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	Follow precautions for safe handling described in this safety data sheet
6.2 Environmental precautions	The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.
6.3 Methods and material for containment and cleaning up	Avoid dust formation. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Transfer to a container for disposal.

SECTION 6: Accidental release measures

6.4 Reference to other sections

For personal protection see section 8. For waste disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid handling which leads to dust formation. Avoid inhalation of high concentrations of dust. Observe occupational exposure limits and minimise the risk of inhalation of dust.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

7.3 Specific end use(s)

The identified uses for this product are detailed in section 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Country	Name	STD	TWA -8Hrs	STEL - 15Min	Notes
Austria	Aluminium Oxide		5.0 mg/m ³	10.0 mg/m ³	A, E
Belgium	Aluminium Oxide	GVB / VLEP / AGW	1.0 mg/m ³		
China	Aluminium Oxide		4.0 mg/m ³		
Czech Republic	Aluminium Oxide	PEL	0.1 mg/m ³		
Denmark	Aluminium Oxide	GRV	2.0 mg/m ³		beregnet som Al
Estonia	Aluminium Oxide		4.0 mg/m ³		
	Chrome Oxide		0.02 mg/m ³	0.06 mg/m ³	C, S, arvutatud Cr
France	Aluminium Oxide	VLEP	10.0 mg/m ³		
Greece	Aluminium Oxide	OTE	10.0 mg/m ³		
Hungary	Aluminium Oxide	MKBS	6.0 mg/m ³		
Italy	Aluminium Oxide	ACGIH	1.0 mg/m ³		A4 ⁽¹⁾
Japan	Aluminium Oxide		0.5 mg/m ³		
Poland	Aluminium Oxide	NDS	2.5 mg/m ³		
Portugal	Aluminium Oxide	VLE	10.0 mg/m ³		A4 ⁽²⁾
Russia	Aluminium Oxide	ПДК	6.0 mg/m ³		Φ, 4
	Chrome Oxide		10.0 mg/m ³		3, ОБУВ
Spain	Aluminium Oxide	VLA	10.0 mg/m ³		como Al
UK	Aluminium Oxide	WEL	10.0 mg/m ³		
	Chrome Oxide		0.5 mg/m ³		as Cr

A = Aveolengängiger Anteil

E = Einatembare Fraktion

GVB = Grenswaarden voor blootstelling aan chemische agentia

VLEP = Valeurs limites d'exposition professionnelle

AGW = Arbeitsplatzgrenzwert

PEL = Příпустné expoziční limity

GRV = Grænseværdier for stoffer og materialer

C = Kantserogeensed ained.

S = Sensibiliseerivad ained.

OTE = Οριακή Τιμή Έκθεσης

MKBS = Munkahelyek kémiai biztonságáról szóló

ACGIH = American Conference of Governmental industrial Hygienists

A4⁽¹⁾ = Non classifiable come carcinogeno per l'uomo

SECTION 8: Exposure controls / personal protection

NDS = Najwyższe Dopuszczalne Stężenie

VLE = Valor limite de exposição

A4⁽²⁾ = Agentes não classificáveis como carcinogénicos no Homem

ПДК = Величина

Ф = аэрозоли преимущественно фиброгенного действия

4 = класс - умеренно опасные.

3 = класс – опасные

ОБУВ = Ориентировочные безопасные уровни воздействия

VLA = Valor limite Ambiental

WEL = Workplace exposure limit

NOTE: To request language / country specific SDS please e-mail sds@lkabminerals.com = Workplace Exposure Limit

8.2 Exposure controls

Protective equipment



Engineering measures:

Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of dust.

Respiratory equipment:

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Wear dust masks in dusty areas.

Hand protection:

No specific hand protection noted, but gloves may still be advisable.

Eye protection:

Wear dust resistant safety goggles where this is a danger of eye contact.

Other protection:

Provide eyewash station.

Hygiene measures:

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

SECTION 9: Physical and chemical properties

9.1 Information on basic and physical and chemical properties

Appearance:	Granular powder, dust
Colour:	Pink
Solubility:	Insoluble in water
Melting point (°C):	~1800

9.2 Other information

Not relevant

SECTION 10: Stability and reactivity

10.1 Reactivity

When water is added, the product reacts with a number of metals forming hydrogen gas, which may form explosive vapour/air mixtures.

10.2 Chemical stability

Stable under normal temperature conditions.

10.3 Possibility of hazardous reactions

Not relevant

10.4 Conditions to avoid

Water, moisture, acids.

10.5 Incompatible materials

Materials to avoid:

Acids, oxidising. Strong alkalis. Alkali earth metals. Alcohols, glycols. Other halogenated organics.

10.6 Hazardous decomposition products

When water is added, the product reacts with a number of metals forming hydrogen gas, which may form explosive vapour/air mixtures.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Other health effects:	This substance has no evidence of carcinogenic properties.
Acute toxicity	
Acute toxicity (Oral LD50):	Not relevant
Acute toxicity (Dermal LD50):	Not relevant
Acute toxicity (Inhalation LC50):	Not relevant
Inhalation:	Dust in high concentrations may irritate the respiratory system.
Ingestion:	May cause discomfort if swallowed.
Skin contact:	Powder may irritate skin.
Eye contact:	Particles in the eyes may cause irritation and smarting.

SECTION 12: Ecological information

Ecotoxicity:	Not regarded as dangerous for the environment.
12.1 Acute fish toxicity:	Not considered toxic to fish.
12.2 Persistence and degradability	
Degradability:	The product is not readily biodegradable.
12.3 Bioaccumulative potential:	The product is not bioaccumulating.
12.4 Mobility in soil:	Not relevant, due to the form of the product.
12.5 Results of PBT and vPvB assessment:	This product does not contain any PBT or vPvB substances.
12.6 Other adverse effects:	None known

SECTION 13: Disposal considerations

13.1 Waste treatment methods:	Dispose of waste and residues in accordance with local authority requirements.
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SECTION 14: Transport considerations

Road transport notes:	Not classified
Rail transport notes:	Not classified
Sea transport notes:	Not classified
Air transport notes:	Not classified
14.1 UN Number:	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
14.2 UN proper shipping name:	Not classified for transportation.
14.3 Transport and hazard class(es):	Not classified for transportation.
14.4 Packing group:	Not classified for transportation.
14.5 Environmental hazards	
Environmentally hazardous substances / marine pollutant: no	

SECTION 14: Transport considerations

- 14.6 Special precautions for user:** Not classified for transportation.
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
Not applicable

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture**
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|----------------------------|--|
| Approved code of practice: | Classification and labelling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. |
| Guidance notes: | Workplace Exposure Limits EH40. |
| EU Legislation: | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulations (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. |
- 15.2 Chemical Safety Assessment:** Not applicable. No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date:	11/10/2016
Revision:	2
Document no:	12,-02INT,16-10
Risk phrases in full:	NC – not classified

Disclaimer:

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