

Low Carbon Ferro Chrome

SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	
Product Name	Low Carbon Ferro Chrome.
Generic name	Ferro Chrome.
Synonym(s)	LCFeCr, Ferro Chrome, Ferro Chromium.
CAS No.	Mixture.
EINECS No.	Mixture.
REACH Registration No.	None assigned.
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Identified use(s)	Raw material for the manufacture of various grades of stainless steel, high chromium castings, speciality steels and carbon steels.
Uses advised against	None known.
1.3 Details of the supplier of the Safety Data Sheet	
Company Identification	Ruschrome Trading GmbH Industriestrasse 4 70565 Stuttgart Germany.
Telephone	+49-711-49047735.
Fax	+49-711-49047739.
E-Mail (competent person)	reach@russianchrome.com
1.4 Emergency telephone number	
Emergency Phone No.	+49-711 49047735 (09.00 – 17.00).

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
2.1.1 Regulation (EC) No. 1272/2008 (CLP)	Not classified as dangerous for supply/use.
2.1.2 Directive 67/548/EEC & Directive 1999/45/EC	Not classified as dangerous for supply/use.
2.2 Label elements	According to Regulation (EC) No. 1272/2008 (CLP)
Product Name	Low Carbon Ferro Chrome.
Hazard Pictogram	None.
Signal word(s)	None.
Hazard statement(s)	None.
Precautionary statement(s)	None.
2.2.2 Label elements	According to Directive 67/548/EEC & Directive 1999/45/EC
Hazard Symbol	None.
Risk Phrases	None.
Safety Phrases	None.
2.3 Other hazards	Repeated and/or prolonged contact may cause dermatitis. High temperature processes can lead to generation of fumes containing chromium (VI).
2.4 Additional Information	None.

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3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

EC Classification No. 1272/2008

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard pictogram(s) and Hazard statement(s)
Chromium	≥68	7440-47-3	231-157-5	01-2119485652-31-0012	None.
Iron Oxide	28-34	1309-37-1	215-168-2	01-2119462838-24-0127	None.
Carbon	0. 1-0.5	7440-44-0	231-153-3	None assigned.	None.
Silicon	≤2.0	7440-21-3	231-130-8	None assigned.	None.

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	EC Classification and Risk Phrases
Chromium	≥68	7440-47-3	231-157-5	01-2119485652-31-0012	None.
Iron Oxide	28-34	1309-37-1	215-168-2	01-2119462838-24-0127	None.
Carbon	0.01-0.5	7440-44-0	231-153-3	None assigned.	None.
Silicon	≤2.0	7440-21-3	231-130-8	None assigned.	None.

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

Unlikely route of exposure.

High temperature processing: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.

Skin Contact

Wash affected skin with soap and water. If symptoms persist, obtain medical attention.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, obtain medical attention.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Repeated and/or prolonged contact may cause dermatitis.

4.3 Indication of immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media

Extinguish with dry chemical, dry sand or special powder for metal fire only.

Unsuitable Extinguishing Media

Water.

5.2 Special hazards arising from the substance or mixture

Decomposes in a fire giving off toxic fumes: Chromium (VI).

5.3 Advice for fire-fighters

Do not breathe fumes. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

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6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection.
6.2 Environmental precautions	Do not allow to enter drains, sewers or watercourses.
6.3 Methods and material for containment and cleaning up	Sweep substance into clean dry container. Transfer to a container for disposal.
6.4 Reference to other sections	See Also Section 8 and 13.
6.5 Additional Information	None.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling	Provide adequate ventilation. Do not breathe fumes. Avoid prolonged skin contact. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Do not eat, drink or smoke during work.
7.2 Conditions for safe storage, including any incompatibilities	Store in a dry place. Keep away from moisture.
Storage Temperature	Ambient.
Storage Life	Stable under normal conditions.
Incompatible materials	Strong oxidising agents and Acids.
7.3 Specific end use(s)	Raw material for the manufacture of various grades of stainless steel, high chromium castings, speciality steels and carbon steels.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
8.1.1 Occupational Exposure Limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note:
Chromium	7440-47-3	-	0.5	-	-	WEL
Iron Oxide	1309-37-1	-	5	-	10	WEL
Carbon	7440-44-0	-	10	-	-	WEL: Inhalable Dust
		-	4	-	-	WEL: Respirable Dust
Silicon	7440-21-3	-	10	-	-	WEL: Inhalable Dust
		-	4	-	-	WEL: Respirable Dust

WEL: Workplace Exposure Limit (UK HSE EH40).

- 8.1.2 Biological limit value** Not established.
8.1.3 PNECs and DNELs Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls Provide adequate ventilation.

8.2.2 Personal protection equipment
 Eye/face protection Wear suitable eye/face protection.



Skin protection (Hand protection/ Other)

Wear suitable gloves.



Respiratory protection

Not normally required.
 High temperature processing: The following information is given as general guidance. Where engineering controls are

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Thermal hazards

8.2.3 Environmental Exposure Controls

not fitted or inadequate wear suitable respiratory protective equipment.

Wear: EN149:2001 FFP2. Use a respirator/filter with at least: PF10: 10 x Protection Factor.

Not applicable.

Do not allow to enter drains, sewers or watercourses.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	Solid.
Appearance	Lumps.
Colour	Metallic Silvery Grey.
Odour	Odourless.
Odour Threshold (ppm)	Not available.
pH (Value)	Not applicable.
Melting Point (°C)	>1500°C.
Boiling Point (°C)	Not available.
Flash Point (°C)	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Explosive limit ranges	Not applicable.
Vapour Pressure (mm Hg)	Not applicable.
Vapour Density (Air=1)	Not applicable.
Density (g/ml)	~6.9g/ml.
Bulk Density	3400 - 3700kg/m ³ .
Solubility (Water)	Insoluble in water.
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not applicable.
Auto Ignition Temperature (°C)	Not applicable.
Decomposition Temperature (°C)	Not available.
Viscosity (mPa.s)	Not applicable.
Explosive properties	Not explosive.
Oxidising properties	Not available.

9.2 Other information

None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Reacts with - Acids: Generate flammable hydrogen gas.
10.4 Conditions to avoid	Keep away from moisture.
10.5 Incompatible materials	Strong oxidising agents and Acids.
10.6 Hazardous Decomposition Product(s)	High temperature processes can lead to generation of fumes containing chromium (VI).

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.2 Mixtures

Acute toxicity Irritation

Low acute toxicity.
Not classified. High temperature processes can lead to generation of fumes containing chromium (VI).
Chromium (VI): May produce an allergic reaction.

Corrosivity

Not classified.

Sensitisation

It is not a skin sensitiser.

Repeated dose toxicity

Repeated and/or prolonged contact may cause dermatitis.
Not classifiable as to its carcinogenicity to humans.

Carcinogenicity

IMPORTANT:

High temperature processes can lead to generation of fumes containing chromium (VI).

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		Chromium (VI) is listed as a carcinogen by: IARC, NIOSH, NTP.
	Mutagenicity	There is no evidence of mutagenic potential.
	Toxicity for reproduction	None anticipated.
11.2	Other information	None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Not harmful to aquatic organisms.
12.2	Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
12.3	Bioaccumulative potential	The substance has no potential for bioaccumulation.
12.4	Mobility in soil	Insoluble in water. The substance has low mobility in soil.
12.5	Results of PBT and VPVB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Recycle. Refer to manufacturer/supplier for information on recovery/recycling.
13.2	Additional Information	Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous for transport.

14.1	UN number	Not applicable.
14.2	Proper Shipping Name	Not applicable.
14.3	Transport hazard class(es)	Not applicable.
14.4	Packing Group	Not applicable.
14.5	Environmental hazards	Not applicable.
14.6	Special precautions for user	Not applicable.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
14.8	Additional Information	Not applicable.

15. SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations	
	Authorisations and/or restrictions on use	None known.
15.1.2	National regulations	None known.
15.2	Chemical Safety Assessment	Not available.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
DNEL	Derived No Effect Level
PNEL	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	vPvB: very Persistent and very Bioaccumulative

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Annex to the extended Safety Data Sheet (eSDS)

No information available.