

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Flux-cored Hardfacing Wire

Revised 15.03.2021

Page 1 of 6

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

1.1. Product identifier

Flux-cored Hardfacing Wire. Trade Name(s): Weldclass CX-1800

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

Use of the substance/mixture

iron/chromium-based flux cored wire for industrial purposes

1.3. Details of the supplier of the safety data sheet

Company name: Weldclass Welding Products
 Street: 6 East West Place
 Place: Taminda NSW 2340
 Telephone: 02 6764 9590
 E-mail: sales@weldclass.com.au
 Website: www.weldclass.com.au

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

There is no obligatory labelling requirement according to the regulations covering preparations 1999/45/EC. May be harmful. May be irritating. May cause sensitization by inhalation and skin contact. May be harmful with intended application by arising ozone and nitrogen oxides. Cancer-causing chromium(VI)-compounds could be generated by welding chromium containing materials.

2.2. Label elements

Regulation (EC) No. 1272/2008

Precautionary statements

P285 In case of inadequate ventilation wear respiratory protection.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.

Additional advice on labelling

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

iron/chromium-based cored wire

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7439-89-6	Iron			50 - 90 %
	231-096-4			
7440-47-3	Chromium			5 - 35 %
	231-157-5			

Full text of H and EUH statements: see section 16.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Flux-cored Hardfacing Wire

Revised 15.03.2021

Page 2 of 6

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Apply fresh air. If irritation of the respiratory passages, due to the product, occurs: call a physician.

After contact with skin

Lather with soap and rinse well with water.

After contact with eyes

Remove contacts. Rinse well with plenty of luke-warm water. Subsequently consult an ophthalmologist.

After ingestion

Wash out mouth with water. Make affected person vomit if conscious when large quantities swallowed.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

metal-fire-drencher, dry sand

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing and gloves (filter mask). Prevent formation of clouds of dust. Aerate closed rooms. Follow safety measures in section 7 and 8.

6.2. Environmental precautions

Prevent dispersion. Do not empty into drains or the aquatic environment.

6.3. Methods and material for containment and cleaning up

Collect spilled material in sealable containers.

6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Prevent formation of clouds of dust. Wear suitable protective clothing and gloves.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store only in original container. Keep in a cool, dry, well-ventilated place. Local exhaust required.

Advice on storage compatibility

Store in a fair distance from oxidizing substances and acids.

7.3. Specific end use(s)

iron/chromium-based cored wire

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Flux-cored Hardfacing Wire

Revised 15.03.2021

Page 3 of 6

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7440-47-3	Chromium	-	0.5		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

Additional advice on limit values

Dust: respirable fraction: 4 mg/m³

Formation of ozone and nitrogen oxides on regular use by plasma flame. Key component: ozone (CAS-Nr. 10028-15-6). Exposure limit value (GER) 0,1 ppm. Exposure limit value (Short term) (GB) 0,2 ppm. Exposure limit value (USA) 0,1 ppm (OSHA).

Cancer-causing chromium(VI)-compounds could be generated by welding chromium containing materials.

Exposure limit value Chromium(VI)-compounds: 0,05 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Local exhaust required.

Protective and hygiene measures

When using do not eat, drink or smoke.

Eye/face protection

Safety goggles and dark lenses as appropriate to the thermal spray process.

Hand protection

Wear suitable protective clothing and heat-insulated gloves. Avoid contact with skin.

Respiratory protection

Respiratory protection necessary at: insufficient ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Cored wire
Colour:	light to dark grey
Odour:	odourless

pH-Value: not applicable

Changes in the physical state

Melting point: approx. 1010 bis 1025 °C

Initial boiling point and boiling range: > 2900 °C

Flash point: not applicable

Flammability

according 92/69 EWG, A10:
not applicable

Lower explosion limits:

not identified

Upper explosion limits:

not identified

Auto-ignition temperature

according 92/69 EWG, A16:
not applicable

Oxidizing properties

according 92/69 EWG, A17: not applicable

Vapour pressure:

negligible

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Flux-cored Hardfacing Wire

Revised 15.03.2021

Page 4 of 6

Density: 2 - 6 g/cm³
 Water solubility: not soluble
Solubility in other solvents
 not identified

9.2. Other information

No information available.

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

No information available.

10.4. Conditions to avoid

stable under normal conditions

10.5. Incompatible materials

oxidizing and acidic material

10.6. Hazardous decomposition products

Formation of ozone and nitrogen oxides on regular use by plasma flame. This reaction is independent to material used.

Cancer-causing chromium(VI)-compounds could be generated by welding chromium containing materials.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No toxicological information is available on the product.

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
7439-89-6	Iron			
	oral	LD50 30,000 mg/kg	Rat	

Irritation and corrosivity

No known symptoms to date.

Sensitising effects

Exposure to high concentrations may lead to sensitizing action to the skin and airways. May lead to allergic or irritative reactions on very sensitive persons.

Carcinogenic/mutagenic/toxic effects for reproduction

none

STOT-repeated exposure

May be irritant to mouth, throat and esophagus on prolonged exposure.

Further information

May be harmful through products of decomposition on regular use (see section 10)

SECTION 12: Ecological information

12.1. Toxicity

No ecological information is available on the product but on the ingredients named in section 3.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Flux-cored Hardfacing Wire

Revised 15.03.2021

Page 5 of 6

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
7439-89-6	Iron				
	Acute fish toxicity	LC50	1,29 mg/l	96 h	
7440-47-3	Chromium				
	Acute fish toxicity	LC50	40,5 mg/l	96 h	
	Acute fish toxicity	LC50	8,75 mg/l		

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Disposal according to the local legislation. Waste of residues: Keep waste separate. Because of possible pollution, remove as industrial waste or hazardous waste. Contaminated packaging: Keep waste separate. Because of possible pollution, remove as industrial waste or hazardous waste.

Waste disposal number of used product

12101

Waste disposal number of contaminated packaging

12101

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 0000

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number: UN 0000

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number: UN 0000

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

Air transport (ICAO)

14.1. UN number: UN 0000

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Flux-cored Hardfacing Wire

Revised 15.03.2021

Page 6 of 6

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Water contaminating class (D): - - not water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Further Information

The information enclosed in this safety data sheet are correct according to our knowledge. They should detail the needs of safety for our products, but demonstrate no guarantee for product attributes and justify no legal relationship. Our departments will provide assistance with any special question regarding the conventional use of our product.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)
