



Revision date: 15.07.2015

EutecTrode EC4023

Safety Data Sheet according to Regulation (EC) No 1907/2006

MEC Holding GmbH Revision No: 3,0

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

1.1. Product identifier

EutecTrode EC4023

SDS 02913

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

Use of the substance/mixture

Welding rod, welding wire

1.3. Details of the supplier of the safety data sheet

Company name: Castolin Eutectic Limited MEC Holding GmbH Street: Unit 10, Merse Road Messer-Platz 1

 Place:
 GB-B98 9NZ Worcestershire
 D-65812 Bad Soden

 Telephone
 +44 (0) 1527 5822 00
 +49 (0) 6196 7760-555

 Telefax
 +44 (0) 1527 5822 01
 +49 (0) 6196 7760-561

Verantwortlich für das Sicherheitsdatenblatt: sds@gbk-ingelheim.de

1.4. Emergency telephone number: Emergency telephone :+49 (0) 6132 / 84463 (GBK GmbH, Ingelheim)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard categories:

Respiratory or skin sensitisation: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - repeated exposure: STOT RE 1

Hazard Statements:

May cause an allergic skin reaction.

Suspected of causing cancer.

Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

Additional advice on labelling

As an article the product does not need to be labelled in accordance with EC-directives or respective national laws. Although this product does not require a hazard warning label, we recommend that the safety precautions should be observed.

Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label according to this Annex (Annex I GHS), if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market, although classified as hazardous in accordance with the criteria of this Annex.

Instead, the supplier shall provide the information to downstream users or distributors by means of the SDS.

Signal word: Danger

Pictograms: GHS07-GHS08





Hazardous components which must be listed on the label

nickel

Hazard statements

H317 May cause an allergic skin reaction. H351 Suspected of causing cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

P285 In case of inadequate ventilation wear respiratory protection.

P314 Get medical advice/attention if you feel unwell.



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P280 Wear protective gloves/protective clothing/eye protection/face protection.
P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P501 Dispose of contents/container to waste treatment facility in accordance with local and national

regulations.

2.3. Other hazards

Welding and brazing processes can cause spatter, melting metal and UV/IR heat can cause burns or start fires. During welding- and brazing processes formed metallic fumes are suspected of being cancer causing agents.

Brazing/welding vapours and fumes from brazing/welding may cause metal fumes fever. Symptoms can appear 4 to 12

hours after. (headache, dizziness, dryness, cough, nausea and fever) May cause irritation by prolonged inhalation of brazing/welding fumes.

Welding fumes (not otherwise specified) are considered to be carcinogenic with no further categorization by NIOSH

(National Institute for Occupational Safety and Health) and IARC (International Agency for the Research on Cancer).

IARC - International Agency for Research on Cancer

NIOSH - National Institute for Occupational Safety and Health

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Base metals and alloys

Hazardous components

EC No	Chemical name	Quantity
CAS No		
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
231-111-4	nickel	>50 %
7440-02-0		
028-002-00-7	Carc. 2, STOT RE 1, Skin Sens. 1; H351 H372 ** H317	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Take affected person into fresh air.

Consult a physician if necessary.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

In the event of persistent symptoms receive medical treatment.

After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids.

In the event of persistent symptoms receive medical treatment.

After ingestion

Rinse mouth.

Consult a physician.

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

No data available.

Hazard statements

H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

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

Treat symptoms.

SECTION 5: Firefighting measures

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5.1. Extinguishing media

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Suitable extinguishing media

Use fire fighting measures that suit the environment and products stored.

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

5.3. Advice for firefighters

In case of fire, wear suitable respiratory equipment with positive air supply.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Breathing apparatus (particle filter) only if dust is formed.

6.2. Environmental precautions

Do not discharge into the drains or bodies of water.

6.3. Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Avoid contact with skin, eyes and clothing.

Use only in well-ventilated areas.

ANSI Z49.1 Safety in Welding, Cutting and allied processes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry place.

Advice on storage compatibility

Incompatible with strong acids and oxidizing agents.

7.3. Specific end use(s)

Welding rod, welding wire

SECTION 8: Exposure controls/personal protection







8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	WEL
		-	10		STEL (15 min)	WEL
-	Nickel and its inorganic compounds (except nickel tetracarbonyl): water-soluble nickel compounds (as Ni)	-	0.1		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

8.2. Exposure controls



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Appropriate engineering controls

Provide appropriate exhaust ventilation at machinery and at places where dust or smoke can be generated.

Protective and hygiene measures

At work do not eat, drink and smoke.

Wash hands and skin before breaks and after work.

Eye/face protection

Safety goggles with side protection (EN 166).

Hand protection

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Use protective gloves for welders (DIN 4841-4).

Use inner-gloves to prevent from allergic reactions due to direct skin contact.

Protective gloves resistant to chemicals made off polychloropren, Minimum coat thickness 0.6 mm, Permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Camapren 722> made by www.kcl.de.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Skin protection

Dust resistant protective clothing.

Respiratory protection

Use suitable breathing apparatus if there is inadequate ventilation. Multi-purpose filter ABEK/P3

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid

Colour:

Odour: Odourless

pH-Value: n.a. Initial boiling point and boiling range: n.a. Flash point: n.a.

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No decomposition if stored and applied as directed.

10.5. Incompatible materials

strong acids and strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Metallic oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Brazing/welding vapours and fumes from brazing/welding may cause metal fumes fever. Symptoms can appear 4 to 12 hours after. (headache, dizziness, dryness, cough, nausea and fever)



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CAS No	Chemical name							
	Exposure routes	Method	Dose	Species	Source			
7440-02-0	nickel							
	oral	LD50 mg/kg	> 9000	Ratte				

Irritation and corrosivity

Based on available data, the classification criteria are not met.

May cause irritation by prolonged inhalation of brazing/welding fumes.

Sensitising effects

May cause an allergic skin reaction. (nickel)

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Causes damage to organs through prolonged or repeated exposure. (nickel)

Welding fumes (not otherwise specified) are considered to be carcinogenic with no further categorization by NIOSH (National Institute for Occupational Safety and Health) and IARC (International Agency for the Research on Cancer).

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (nickel)

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

SECTION 12: Ecological information

12.1. Toxicity

No data available.

CAS No	Chemical name								
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source			
7440-02-0	nickel								
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Danio rerio				
	Acute algae toxicity	ErC50	100 mg/l	72 h	Selenastrum capricornutum				
	Acute crustacea toxicity	EC50	> 100 mg/l	48 h	Daphnia magna				

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Where possible recycling is preferred to disposal.

Dust and in exhaust systems separated particles dispose of in compliance with local regulations.



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Waste disposal number of waste from residues/unused products

160303 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products;

inorganic wastes containing dangerous substances

Classified as hazardous waste.

Waste disposal number of used product

150202 WASTE PACKAGING: ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; absorbents, filter materials, wiping cloths and protective clothing; absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing

contaminated by dangerous substances

Classified as hazardous waste.

Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging

waste); plastic packaging

SECTION 14: Transport information

Land transport (ADR/RID); Marine transport (IMDG); Air transport (ICAO); Inland waterways transport (ADN)

14.1. UN number:

No hazardous material as defined by the transport regulations.

14.2. UN proper shipping name:

No hazardous material as defined by the transport regulations.

14.3. Transport hazard class(es):

No hazardous material as defined by the transport regulations.

14.4. Packing group:

No hazardous material as defined by the transport regulations.

14.5. Environmental hazards

No hazardous material as defined by the transport regulations.

14.6. Special precautions for user

No hazardous material as defined by the transport regulations.

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

No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

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

EU regulatory information

1999/13/EC (VOC):

0 %

National regulatory information

15.2. Chemical safety assessment

For this mixture a chemical safety assessment has been carried out.

SECTION 16: Other information

Changes

Section: 2, 3

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships



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IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H- and EUH-phrases (Number and full text)

H317 May cause an allergic skin reaction. H351 Suspected of causing cancer.

H372 Causes damage to organs through prolonged or repeated exposure.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

IARC - International Agency for Research on Cancer

NIOSH - National Institute for Occupational Safety and Health

Literature:

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