

## SAFETY DATA SHEET

ELEKTROD R 85 202910303

Last changed: 14/06/2012

Internal No: 202910303

### 1 Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name / designation ELEKTROD R 85 202910303

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

#### 1.3 Details of the supplier of the safety data sheet

##### NATIONAL MANUFACTURER/IMPORTER

Enterprise Luna Verktyg & Maskin AB  
Postal code 441 80 Alingsås  
Country Sverige  
E-mail mikael.olsson@luna.se  
Internet www.luna.se  
Telephone +46 322 60 60 00  
Fax +46 60 64 43

##### CONTACT PERSONS

| Name          | E-mail | Telephone | Country |
|---------------|--------|-----------|---------|
| Mikael Olsson |        |           |         |

### 2 Hazards identification

#### 2.1 Classification of the substance or mixture

DPD Classification: R43

CLP Classification: Skin Sens. 1H317

Most important HSE hazard effects: May cause an allergic skin reaction.

#### 2.2 Label elements



Signal word: None

EC-Label: No

##### COMPOSITION

Krom (< 1 %), Nickel. (< 2 %), Manganese (< 2 %), Molybden (< 1 %)

##### H Statements

H317 May cause an allergic skin reaction.

#### 2.3 Other hazards

### 3 Composition/information on ingredients

#### 3.2 Mixtures

## SAFETY DATA SHEET

**ELEKTROD R 85 202910303**

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| Ingredient name | Reg.No | EC No. | CAS No.   | Conc. (wt%) | DPD-Classification | CLP-classification                |
|-----------------|--------|--------|-----------|-------------|--------------------|-----------------------------------|
| Krom            |        |        | 7440-47-3 | < 1 %       |                    |                                   |
| Nickel.         |        |        | 7440-02-0 | < 2 %       | Xn,Xi,R40 - R43    | Skin Sens. 1 H317<br>Carc. 2 H351 |
| Manganese       |        |        | 7439-96-5 | < 2 %       | Xn,R48             | STOT RE 2 H373                    |
| Molybden        |        |        | 7439-98-7 | < 1 %       |                    |                                   |

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

The EUH hazard statements mentioned in CLP-classification are only label elements.

### 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.

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

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

### 5 Fire-fighting measures

#### 5.1 Extinguishing media

##### SUITABLE EXTINGUISHING MEDIA:

All common fire extinguishing agents may be used.

#### 5.2 Special hazards arising from the substance or mixture

#### 5.3 Advice for fire-fighters

### 6 Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

##### PERSONAL PRECAUTIONS

No special precautions required.

#### 6.2 Environmental precautions

##### ENVIRONMENTAL PRECAUTIONS

No special precautions required.

#### 6.3 Methods and material for containment and cleaning up

##### METHODS AND MATERIAL

See section 13.

#### 6.4 Reference to other sections

### 7 Handling and Storage

#### 7.1 Precautions for safe handling

## SAFETY DATA SHEET

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Internal No: 202910303

### PRECAUTION FOR SAFE HANDLING

No special precautions required.

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### 7.2 Conditions for safe storage, including any incompatibilities

#### CONDITION FOR SAFE STORAGE, INCLUDING ANY UNCOMPATIBILITIES

No special precautions required.

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### 7.3 Specific end uses

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## 8 Exposure controls / Personal protection

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### 8.1 Control parameters

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### 8.2 Exposure controls

#### APPROPRIATE ENGINEERING CONTROLS

Use only in well-ventilated areas. Avoid contact with skin. Observe normal hygiene such as washing hands before meals, etc.

#### EYE PROTECTION

Use eye protection.

#### SKIN PROTECTION

Wear suitable protective clothing. Use a welding helmet during welding

#### HAND PROTECTION

Wear suitable gloves.

#### RESPIRATORY PROTECTION

Use breathing masks and eye protection when smoke is present.

#### OTHER INFORMATION

During welding fumes will be formed The fumecontent is depending on the electrode type and the base material  
Primarily iron oxid, secondarily complex oxides of manganese, nickel, chromium and molybdenum may be formed Also  
ozone and nitrogen dioxide can be formed by arc radiation

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## 9 Physical and chemical Properties

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### 9.1 Information on basic physical and chemical properties

**PHYSICAL STATE** Electrode

## SAFETY DATA SHEET

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| Parameter                               | Value/unit     | Method/reference | Observation |
|---|----------------|------------------|-------------|
| pH concentrate                          | No data        |                  |             |
| pH in solution                          | No data        |                  |             |
| Melting point                           | 1000 - 1500 °C |                  |             |
| Freezing point                          | No data        |                  |             |
| Initial boiling point and boiling range | No data        |                  |             |
| Flash point                             | No data        |                  |             |
| Evaporation rate                        | No data        |                  |             |
| Flammability (solid, gas)               | No data        |                  |             |
| Flammability limits                     | No data        |                  |             |
| Explosion limits                        | No data        |                  |             |
| Vapour pressure                         | No data        |                  |             |
| Vapour density                          | No data        |                  |             |
| Relative density                        | No data        |                  |             |
| Partition coefficient                   | No data        |                  |             |
| Auto-ignition temprature                | No data        |                  |             |
| Decomposition temprature                | No data        |                  |             |
| Viscosity                               | No data        |                  |             |

### 9.2 Other safety information

| Note no. | Comments |
|----------|----------|
|          |          |

### 10 Stability and Reactivity

#### 10.1 Reactivity

#### 10.2 Chemical stability

#### 10.3 Possibility of hazardous reactions

#### 10.4 Conditions to avoid

##### CONDITIONS TO AVOID

Avoid contact with strong acids. Avoid contact with bases.

#### 10.5 Incompatible materials

#### 10.6 Hazardous decomposition products:

### 11 Toxicological information

#### 11.1 Toxicological effects

### 12 Ecological information

#### 12.1 Toxicity

#### 12.2 Persistence and degradability

#### 12.3 Bioaccumulative potential

#### 12.4 Mobility in soil

#### 12.5 Results of PBT and vPvB assessment

#### 12.6 Other adverse effects

## SAFETY DATA SHEET

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### 13 Disposal considerations

#### 13.1 Waste treatment methods

##### GENERAL REGULATIONS

Dump or destroy in accordance with official recommendations and applicable legislation.

### 14 Transport information

Classified as Dangerous Goods: **No**

#### Land transport (ADR/RID)

|                           |                 |                            |                 |
|---------------------------|-----------------|----------------------------|-----------------|
| 14.1 UN-No.               | Not applicable. | 14.4 Packing group         | Not applicable. |
| 14.2 Proper Shipping Name | Not applicable. | 14.5 Environmental hazards | Not applicable. |
| 14.3 Class(es)            | Not applicable. |                            |                 |
| Hazard label(s)           | Not applicable. |                            |                 |
| Hazard ID:                | Not applicable. | Tunnel restriction code    | Not applicable. |

#### Inland water ways transport (ADN)

|   |                 |                            |                 |
|---|-----------------|----------------------------|-----------------|
| 14.1 UN-No.                               | Not applicable. | 14.4 Packing group         | Not applicable. |
| 14.2 Proper Shipping Name                 | Not applicable. | 14.5 Environmental hazards | Not applicable. |
| 14.3 Class(es)                            | Not applicable. |                            |                 |
| Environmentally hazardous in tank-vessels | Not applicable. |                            |                 |

#### Sea transport (IMDG)

|                             |                 |                            |                 |
|-----------------------------|-----------------|----------------------------|-----------------|
| 14.1 UN-No.                 | Not applicable. | 14.4 Packing group         | Not applicable. |
| 14.2 Proper Shipping Name   | Not applicable. | 14.5 Environmental hazards | Not applicable. |
| 14.3 Class(es)              | Not applicable. |                            |                 |
| Sub Risk:                   | Not applicable. |                            |                 |
| IMDG Code segregation group | Not applicable. |                            |                 |
| Marine pollutant            | Not applicable. |                            |                 |
| EMS:                        | Not applicable. |                            |                 |

#### Air transport (ICAO-TI / IATA-DGR)

|                           |                 |                            |                 |
|---------------------------|-----------------|----------------------------|-----------------|
| 14.1 UN-No.               | Not applicable. | 14.4 Packing group         | Not applicable. |
| 14.2 Proper Shipping Name | Not applicable. | 14.5 Environmental hazards | Not applicable. |
| 14.3 Class(es)            | Not applicable. |                            |                 |
| Hazard label(s)           | Not applicable. |                            |                 |

### 15 Regulatory information

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

### 15.2 Chemical Safety Assessment

### 16 Other information

#### LIST OF RELEVANT R-PHRASES

|     |   |
|-----|---|
| R40 | Limited evidence of a carcinogenic effect.                |
| R43 | May cause sensitisation by skin contact.                  |
| R48 | Danger of serious damage to health by prolonged exposure. |

#### LIST OF RELEVANT H-STATEMENTS

|      |  |
|------|--|
| H317 | May cause an allergic skin reaction.                               |
| H351 | Suspected of causing cancer.                                       |
| H373 | May cause damage to organs through prolonged or repeated exposure. |