

ELEKTROD RMI 316LS 206140105

Last changed: 20/06/2012 Internal No: 206140105

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

1.1 Product identifier

Trade name / designation ELEKTROD RMI316LS 206140105

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

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CONTACT PERSONS

| Name | E-mail | Telephone | Country |
|----------|--------|-----------|---------|
| MILESTON | | | |

Mikael Olsson

2 Hazards identification

2.1 Classification of the substance or mixture

DPD Classification: Carc. Cat. 3; R40, R43

CLP Classification: Skin Sens. 1BH317, Carc. 2H351

Most important HSE hazard effects: May cause an allergic skin reaction. Suspected of causing cancer.

2.2 Label elements



Signal word: None

EC-Label: No

COMPOSITION

Nickel. (12 %), Cr (18,5 %), Mn (1,75 %), Si (0,85 %), Mo (2,7 %)

H Statements

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

2.3 Other hazards

3 Composition/information on ingredients

3.2 Mixtures



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| Ingredient name | Reg.No | EC No. | CAS No. | Conc. (wt%) | DPD-Classification | CLP-classification |
|-----------------|--------|--------|-----------|----------------|--------------------|---|
| Nickel. | | | 7440-02-0 | 12 % | Xn,Xi,R40 - R43 | Skin Sens. 1 H317 Carc. 2 H351 |
| Cr | | | 7440-47-3 | 18,5 % | | |
| Mn | | | 7439-96-5 | 1,75 % | | |
| Si | | | 7440-21-3 | 0,85 % | Xi,R36/37/38 | Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335 |
| Мо | | | 7439-98-7 | 2,7 % | | |

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

During welding fume can be inhaled: bring patient in fresh air, breath in fresh air deeply. Contact physician if necessary

INGESTION

Not applicable.

SKIN CONTACT

Little or no skin irritation.

Remove contaminated clothing. Wash the skin immediately with soap and water.

Get medical attention if irritation persists after washing.

EYE CONTACT

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

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.



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6.3 Methods and material for containment and cleaning up

METHODS AND MATERIAL

Dumped according to local and national regulations.

6.4 Reference to other sections

7 Handling and Storage

7.1 Precautions for safe handling

PRECAUTION FOR SAFE HANDLING

Observe normal care

7.2 Conditions for safe storage, including any incompatibilities

CONDITION FOR SAFE STORAGE, INCLUDING ANY UNCOMPATIBILITIES

Isolate from acids and other materials that the product may react with (see under reactivity.)

7.3 Specific end uses

8 Exposure controls / Personal protection

8.1 Control parameters

8.2 Exposure controls

APPROPRIATE ENGINEERING CONTROLS

EYE PROTECTION

Use eye protection.

SKIN PROTECTION

Use well fitting working clothes
Use a welding helmet during welding

HAND PROTECTION

Wear suitable gloves.

RESPIRATORY PROTECTION

During welding fumes will be formed The fumecontant 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

Effective ventilation is presupposed or suitable respirator.

9 Physical and chemical Properties

9.1 Information on basic physical and chemical properties

PHYSICAL STATE Electrode

COLOUR Metal-coloured.



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| Parameter | Value/unit | Method/reference | Observation |
|---|------------|------------------|-------------|
| pH consentrate | No data | | |
| pH in solution | No data | | |
| Melting point | 1528 °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 | | |
| Explotion 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

CHEMICAL STABILITY

Stable up to the melting point.

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

10.5 Incompatible materials

INCOMPATIBLE MATERIALS

Reacts with strong acids. Risk of hydrogen formation.

10.6 Hazardous decomposition products:

11 Toxicological information

11.1 Toxicological effects

12 Ecological information

12.1 Toxicity

ECOTOXICITY

Not known

12.2 Persistence and degradability

12.3 Bioaccumulative potential



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12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

13 Disposal considerations

13.1 Waste treatment methods

GENERAL REGULATIONS

Dumped according to local and national regulations.

14 Transport information

Classified as Dangerous Goods: No

| Land transpor | t (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 | Not applicable. |

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

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



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Not applicable.

Air transport (ICAO-TI / IATA-DGR)

14.4 Packing 14.1 UN-No. Not applicable. Not applicable.

group 14.2 Proper Not applicable. 14.5

Environmental

Shipping Name hazards

14.3 Not applicable.

Class(es) Hazard

Not applicable. label(s)

15 Regulatory information

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

15.2 Chemical Safety Assessment

OTHER INFORMATION

Warning do not inhale welding fumes Medium acute toxicity. Risk of injuries with long term or frequent inhalation. Ensure that ventilation is good. See the Safety Data Sheet for the type of electrode in question.

16 Other information

| LIST OF R | LIST OF RELEVANT R-PHRASES | | |
|-----------|--|--|--|
| R36/37/38 | Irritating to eyes, respiratory system and skin. | | |
| R40 | Limited evidence of a carcinogenic effect. | | |
| R43 | May cause sensitisation by skin contact. | | |

| LIST OF R | LIST OF RELEVANT H-STATEMENTS | | |
|-----------|--------------------------------------|--|--|
| H315 | Causes skin irritation. | | |
| H317 | May cause an allergic skin reaction. | | |
| H319 | Causes serious eye irritation. | | |
| H335 | May cause respiratory irritation. | | |
| H351 | Suspected of causing cancer. | | |