SAFETY DATA SHEET

ELEKTROD RI 316 L 206000200

Last changed: 18/06/2012 Internal No: 206000200

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

1.1 Product identifier

Trade name / designation ELEKTROD RI 316 L 206000200

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: Carc. Cat. 3; R40, R43

CLP Classification: Skin Sens. 1H317, 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

Si (0,8 %), Mn (1 %), Krom (18,5 %), Nickel. (12 %), Molybden (2,8)

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
Si			7440-21-3	0,8 %	Xi,R36/37/38	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335
Mn			7439-96-5	1 %		
Krom			7440-47-3	18,5 %		
Nickel.			7440-02-0	12 %	Xn,Xi,R40 - R43	Skin Sens. 1 H317 Carc. 2 H351
Molybden			7439-98-7	2,8		

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

Not applicable.

EYE CONTACT

Not applicable.

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:

Extinguishing agent: carbon dioxide, powder, foam, a wide water jet or water mist.

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

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

No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities

CONDITION FOR SAFE STORAGE, INCLUDING ANY UNCOMPATIBILITIES

No specific storage precautions noted.

7.3 Specific end uses

8 Exposure controls / Personal protection

8.1 Control parameters

8.2 Exposure controls

APPROPRIATE ENGINEERING CONTROLS

In case od dust or smoke: keep foodstuffs sealed
Avoid direct contact.

EYE PROTECTION

Use eye protection.

SKIN PROTECTION

Use well fitting working clothes Use a welding helmet during welding The fumecontant is depending on the electrode type and the base material

HAND PROTECTION

Wear suitable gloves.

RESPIRATORY PROTECTION

If ventilation is insufficient, suitable respiratory protection must be applied. Protective clothing must be stored separately from other clothing. Wash your hands thoroughly after handling and before eating or smoking.

OTHER INFORMATION

During welding fumes will be formed 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

9 Physical and chemical Properties

9.1 Information on basic physical and chemical properties

PHYSICAL STATE Electrode

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Parameter	Value / unit	Method / reference	Observation
pH consentrate	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		
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

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

CONDITIONS TO AVOID

Avoid contact with acids and alkalies.

10.5 Incompatible materials

10.6 Hazardous decomposition products:

HAZARDOUS DECOMPOSITION PRODUCTS

Not known

11 Toxicological information

11.1 Toxicological effects

ACUTE TOXICITY - DERMAL

Repeated or protracted exposure may cause chronic difficulties to sensitive persons.

CARCINOGENICITY

Limited evidence of a carcinogenic effect.

12 Ecological information

12.1 Toxicity

ECOTOXICITY

Not known

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

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 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.		
Enviromentally 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.		

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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

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 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 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.