

SAFETY DATA SHEET

ELEKTROD RMA H30 206210106

Last changed: 20/06/2012

Internal No: 206210106

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

1.1 Product identifier

Trade name / designation ELEKTROD RMA H30 206210106

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:

CLP Classification:

Most important HSE hazard effects:

2.2 Label elements

Signal word: None

EC-Label: No

COMPOSITION

Cr (< 1,5 %), Mn (< 0,8 %), Mo (< 0,5 %)

2.3 Other hazards

3 Composition/information on ingredients

3.2 Mixtures

| Ingredient name | Reg.No | EC No. | CAS No. | Conc. (wt%) | DPD-Classification | CLP-classification |
|-----------------|--------|--------|-----------|-------------|--------------------|--------------------|
| Cr | | | 7440-47-3 | < 1,5 % | | |
| Mn | | | 7439-96-5 | < 0,8 % | | |
| Mo | | | 7439-98-7 | < 0,5 % | | |

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

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

SAFETY DATA SHEET

ELEKTROD RMA H30 206210106

Last changed: 20/06/2012

Internal No: 206210106

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:

Can be extinguished with powder or dry sand.

UNSUITABLE EXTINGUISHING MEDIA

Do not use water. Do not use water mist.

5.2 Special hazards arising from the substance or mixture

SPECIAL HAZARDS

AluminiumCan form dust clouds that may explode on contact with flames, heat and oxidizers.

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

SAFETY DATA SHEET

ELEKTROD RMA H30 206210106

Last changed: 20/06/2012

Internal No: 206210106

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

Keep container dry.

7.3 Specific end uses

8 Exposure controls / Personal protection

8.1 Control parameters

8.2 Exposure controls

EYE PROTECTION

Use eye protection.

SKIN PROTECTION

Use well fitting working clothes

Use a welding helmet during welding. Avoid direct contact. In case of dust or smoke: keep foodstuffs sealed. Protective clothing must be stored separately from other clothing. Wash your hands thoroughly after handling and before eating or smoking.

HAND PROTECTION

Wear suitable gloves.

RESPIRATORY PROTECTION

During welding fumes will be formed

Effective ventilation is presupposed or suitable respirator.

OTHER INFORMATION

Possible reaction products i welding fume Manganese oxide, ozon, nitrogen dioxid

9 Physical and chemical Properties

9.1 Information on basic physical and chemical properties

PHYSICAL STATE Electrode

SAFETY DATA SHEET

ELEKTROD RMA H30 206210106

Last changed: 20/06/2012

Internal No: 206210106

| 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

CHEMICAL STABILITY

Stable under normal conditions

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

CONDITIONS TO AVOID

Avoid contact with acids and alkalies.

10.5 Incompatible materials

INCOMPATIBLE MATERIALS

Dust from aluminium are considerable reaktive with water, strong oxidizers, acids and alkalis, halogenated compounds and iron oxide

10.6 Hazardous decomposition products:

11 Toxicological information

11.1 Toxicological effects

12 Ecological information

12.1 Toxicity

ECOTOXICITY

Not known

SAFETY DATA SHEET

ELEKTROD RMA H30 206210106

Last changed: 20/06/2012

Internal No: 206210106

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. | | |
| 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. | | |

SAFETY DATA SHEET

ELEKTROD RMA H30 206210106

Last changed: 20/06/2012

Internal No: 206210106

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