

MIGTRÅD RM 70 206030512

Last changed: 18/06/2012

Internal No: 206030512

Country

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

1.1 Product identifier

Trade name / designation MIGTRÅD RM 70 206030512

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

E-mail

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 Mikael Olsson

2 Hazards identification

2.1 Classification of the substance or mixture

DPD Classification:

Xn; R48

CLP Classification:

STOT RE 2H373

Most important HSE hazard effects: May cause damage to organs through prolonged or repeated exposure.

Telephone

2.2 Label elements



Signal word: None

EC-Label: No

COMPOSITION

Manganese (< 2 %)

H Statements

H373 May cause damage to organs through prolonged or repeated exposure.

2.3 Other hazards

3 Composition/information on ingredients

3.2 Mixtures



MIGTRÅD RM 70 206030512

| Last changed: 18/06/2012 Internal No: 206030 | | | | | ernal No: 206030512 | |
|--|--------|--------|-----------|----------------|---------------------|--------------------|
| Ingredient name | Reg.No | EC No. | CAS No. | Conc. (wt%) | DPD-Classification | CLP-classification |
| Manganese | | | 7439-96-5 | < 2 % | Xn,R48 | STOT RE 2 H373 |

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

6.2 Environmental precautions

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

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 special precautions required.

7.3 Specific end uses

8 Exposure controls / Personal protection



MIGTRÅD RM 70 206030512

Last changed: 18/06/2012

8.1 Control parameters

OTHER INFORMATION REGARDING LIMIT VALUES AND MONITORING

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

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 breathing masks and eye protection when smoke is present.

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 fumecontant is depending on the electrode type and the base material Primarily iron oxid, secondarily complex oxides of manganese 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

| 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 |

Internal No: 206030512



MIGTRÅD RM 70 206030512

Last changed: 18/06/2012

Internal No: 206030512

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

Strong acids. Strong alkalis.

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

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 | 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 code | Not applicable. | |



MIGTRÅD RM 70 206030512

Internal No: 206030512 Last changed: 18/06/2012 Inland water ways transport (ADN) 14.4 Packing 14.1 UN-No. Not applicable. Not applicable. group 14.2 Proper Not applicable. 14.5 Not applicable. Shipping Environmental Name hazards 14.3 Class(es) Not applicable. Enviromentally Not applicable. hazardous in tank-vessels

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

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

R48 Danger of serious damage to health by prolonged exposure.

LIST OF RELEVANT H-STATEMENTS

H373 May cause damage to organs through prolonged or repeated exposure.