Safety data sheet

ISO 11014-1 / 91/155/EEC

13-11-08 Doc.No. sds-4154–LSW rev.00

Product name	Al 99.8	AlMn	AlSi12
	AlSi5	Reptec AlSi12	Reptec AlSi5

1. PRODUCT AND COMPANY DESIGNATION

Product Type	SMAW welding electrode
Supplier	Lincoln Smitweld B.V.
Address	P.O. Box 253 NL-6500 AG Nijmegen The Netherlands
Telephone	+31.243.522.911
Telefax	+31.243.522.213

2. DETAILS OF COMPOSITION

Type: Preparation or substance

Dangerous ingredients (if applicable):

Name	Concentration	CAS-no.
Manganese and/or manganese alloys and compounds (as Mn)	< 1	7439-96-5
Magnesium alloys and/or magnesium compounds (as Mg)	< 5	7439-95-4
Silicon alloys and/or silicon compounds (as Si)	< 15	7440-21-3

3. POTENTIAL RISKS

Classification

During welding fumes will be formed. The content is depending on the electrode type and the base material. Primarily aluminum oxide; secondarily complex oxides of magnesium or silicon may be formed. Also ozone and nitrogen dioxide can be formed by arc radiation.

4. FIRST AID MEASURES

If inhaled	Not applicable (During welding fume can be inhaled: bring patient in fresh air; breath in fresh air deeply. Contact physician if necessary).
If skin contact occurs	Not applicable.
If it comes into contact with eyes	Not applicable.
If swallowed	Not applicable (During welding: see if inhaled).
Remarks	

5. FIRE PREVENTION MEASURES

Suitable extinguishing media	All known extinguishing substances may be used.
Remarks	

6. MEASURE IN CASE OF UNINTENTIONAL RELEASE

Personal protective measures	None.
Environmental protection measures	No special measures are required.
Cleaning methods	Dispose material according to point 13.

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7. HANDLING AND STORAGE (for safety)

Handling: No special measures are necessary.

Storage

- Special requirements: No special measures are necessary.
- Incompatible products: Not applicable.
- Packaging material: No special requirements.

8. EXPLOSION PREVENTION/PERSONEL PROTECTION

Measures to limit explosions: No further measures.

Remark

During welding fumes will be formed. The content is depending on the electrode type and the base material. Primarily aluminum oxide; secondarily complex oxides of magnesium or silicon may be formed. Also ozone and nitrogen dioxide can be formed by arc radiation.
Possible reaction products:

CAS-no.	Description	MAC-value (NL) [mg/m^3] TGG8
	Welding fume	3,5*
7439-96-5	Manganese oxide	1
14464-46-1	Silicon oxide	0,075
1309-48-4	Magnesium oxide (as Mg)	10
10028-15-6	Ozone	0,12 (TGG 15 min.)
10102-44-0	Nitrogen dioxide	4

*per January 2003 (currently 5)

Personal protection

- Breathing protection: None (see item 16). Ensure adequate ventilation. Possibly use breathing masks see UVV (VGB 15) paragraph 27.
- Protection of hands: Use suitable hand protection.
- Eye protection: Use protective glasses.
- Protection of skin and body: Use well fitting working clothes and during welding a welding helmet.

Hygiene regulations: In case of dust or smoke: keep foodstuffs sealed. Avoid direct skin contact. Store and wash working clothes separately. Clean face and hands thoroughly before eating/drinking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Further information

Physical state

- Form: Electrode.
- Colour
- Odour: None.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Other information

pH value	Not applicable.
Melting point	1000 - 1500°C.
Ignition point	Not applicable.
Explosion limits	Non-explosive.
Density	-
Solubility in water	Insoluble.

10. STABILITY AND REACTIVITY

Avoid contact with	Strong acid and base solutions.
Dangerous residual products	Not known for unused product; see also item 8.

11. DATA REGARDING TOXICITY

Acute	Component	Method	Value
-	-	-	-

Sensitisation	Not known.
Chronical	Not known.

See also item 3.

12. ECOLOGICAL DATA

No harmful effects of this product on the environment are known.

13. DISPOSAL DATA

Product	Contact government for regulations.
Packaging	Contact government for regulations.

14. TRANSPORT INFORMATION

ADR/RID	No dangerous substance.
ADN/ADNR	No dangerous substance.
IMDG	No dangerous product.
ICAO/IATA-DGR	No dangerous substance.

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15. REGULATIONS

Protect yourself and others. Take precautions when welding. Follow your employers' safety practice, which should be based on manufacturers hazard data available to your employer. Fumes and gases can be dangerous to your health. Arc rays can injure eyes and burn skin. Electric shock can kill. Read and understand the manufacturers instructions and your employer's safety practices. Keep your head out of the fumes. Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone, and the general area. Wear correct eye, ear and body protection. Do not touch live electrical parts. U.K.: see WMA No.236 and 237 and HSE Guidance Note EH 40. U.S.A.: See American Standard Z 49.1 "Safety in Welding and Cutting", published by the American Welding Society, 550 Le Jeune Rd, Miami, Florida 33126-5699; OSHA Safety and Health Standards, 29 CFR 1910, available from U.S. Government printing office, Washington D.C. 20402-0001.

16. OTHER INFORMATION

All national/local prescriptions remain applicable. The data given in this sheet relate to the unused product, unless specified otherwise. During usage dangerous products can be formed (welding fume, radiation, etc.). Above-mentioned values are no guarantee for product properties. They are based on current knowledge.

	Department	Name	Date	Initials
Prepared	Consumables Engineering	V. van der Mee	Aug. 1st, 2001	
Approved	Quality Systems	H. Meelker	010801	