



SAFETY DATA SHEET

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Revised edition no : 1

Date : 23 / 9 / 2014

Supersedes : 28 / 8 / 2014

TENAX 35S

E-00827

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

1.1. Product identifier

Trade name : TENAX 35S

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Electric arc welding coated electrode.

1.3. Details of the supplier of the safety data sheet

Company identification : TALARC PTY LTD
10-16 Syme Street
Brunswick, Vic 3056 Australia
Tel: + 61 3 9388 0588
sales@talarc.com

1.4. Emergency telephone number

Emergency phone nr : +61 3 9388 0588

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Not applicable.

2.2. Label elements

Not applicable.

2.3. Other hazards

Risk by welding use

Heat : Spatter and melting metal can cause burn injuries.
Radiation : UV, IR radiations. Arc ray can severely damage eyes or skin.
Fumes : Formation of dangerous fumes during use. Inhalation of welding fumes may cause respiratory irritation. Cough. Excessive or prolonged inhalation of fumes may cause metal fume fever.
Electricity : Electric shocks can kill.
Magnetic fields : Persons with a pacemaker should not go near welding or cutting operations until they have consulted their doctor and obtained information from the manufacturer of the device.

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Substance name	Contents	CAS No	EC No	Annex No	Ref REACH	Classification
Potassium silicate	: 0.1 - 1 %	1312-76-1	215-199-1	----	----	Xi; R36/38 Eye irrit 2 Skin Irrit. 2
Kaolinite	: 1 - 3 %	1318-74-7	215-286-4	----	----	Not classified (DSD/DPD) Not classified (GHS)
Fluorite (CaF ₂)	: 3 - 7 %	14542-23-5	238-575-7	----	----	Not classified (DSD/DPD) Not classified (GHS)
Iron	: 50 - 75 %	7439-89-6	231-096-4	----	----	Not classified (DSD/DPD) Not classified (GHS)
Magnesium powder (pyrophoric)	: 0.1 - 1 %	7439-95-4	231-104-6	012-001-00-3	----	F; R15-R17 Pyr. Sol. 1 Water-react. 1
Manganese	: 1 - 3 %	7439-96-5	231-105-1	----	----	Not classified (DSD/DPD) Not classified (GHS)

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SECTION 3 Composition/information on ingredients (continued)

Substance name	Contents	CAS No	EC No	Annex No	Ref REACH	Classification
Silicon Dioxide	0.1 - 1 %	7631-86-9	231-545-4	----	----	Not classified (DSD/DPD) Not classified (GHS)

SECTION 4 First aid measures

4.1 Description of first aid measures

- Inhalation : If breathing becomes difficult (due to inhalation of fume), take the patient to fresh air and get them to breathe deeply. Seek medical attention if symptoms persist.
- Skin contact : In case of burn with hot metal, flush with plenty of water. Take off immediately all contaminated clothing. Seek medical attention if burns develop.
- Eye contact : In case of burn with hot metal, flush with plenty of water. Seek medical attention immediately.
- Ingestion : Ingestion unlikely. Obtain emergency medical attention.

4.2 Most important symptoms and effects, both acute and delayed

See Heading 2.3.

4.3. Indication of any immediate medical attention and special treatment needed

Not applicable.

SECTION 5 Firefighting measures

5.1. Extinguishing media

Extinguishing media

- Suitable : Powder.
- Not to be used : Water.
- Surrounding fires : Cool nearby material.

5.2. Special hazards arising from the substance or mixture

Flammable class : Not combustible.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General precautions : Not applicable.

6.2. Environmental precautions

Environmental precautions : Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

6.4. Reference to other sections

See Heading 8.

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SECTION 7 Handling and storage

7.1. Precautions for safe handling

Handling : Provide local exhaust or general room ventilation to minimize fumes concentrations. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Store in dry protected location to prevent any moisture contact. Keep container closed when not in use.

7.3. Specific end use(s)

Not applicable.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits : -

8.2. Exposure controls

Personal protection

- **Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe gas/fumes/vapour.
- **Hand protection** : Welding gloves.
- **Skin protection** : Skin protection appropriate to the conditions of use should be provided.
- **Eye protection** : Use a protection mask equipped with suitable filter glasses. Interdiction to wear contact lenses.

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid.
Colour : Grey.
Odour : Odourless.
Density : > 1
pH value : Not applicable.
Melting zone [°C] : ca 1500
Evaporation rate : Not applicable.
Flash point [°C] : Not applicable.
Explosion limits - lower [%] : Not applicable.
Explosion limits - upper [%] : Not applicable.
Auto-ignition temperature : Not applicable.
Vapour pressure : Not applicable.
Solubility in water : Insoluble.
Partition coefficient : n-octanol / water : Not applicable.
Viscosity : Not applicable.
Oxidising properties : Not applicable.

9.2. Other information

Not applicable.

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SECTION 10 Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable under normal conditions. (< 300°C)

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

None under normal conditions.

10.5. Incompatible materials

Materials to avoid : Contact with chemical substances like acids ou bases could cause generation of gas.

10.6. Hazardous decomposition products

Hazardous decomposition products : Formation of dangerous fumes during use. Welding fumes are classified as "possibly carcinogenic to humans (Group 2B)" by the IARC (International Agency for Research on Cancer). Reasonably expected gaseous products would include carbon oxides, nitrogen oxides and ozone.**Fume Data Sheet** : These hazardous products could include those from the reaction or oxidation of the components listed in section 3 or included in base material.**Fumes Emission Rate** : The amount of fumes generated change with the welding parameters and the diameters of the consummable. Refer to applicable national exposure limits for fume compounds and national exposure limits for fumes.**Other information** : In case of work on parts covered by coatings such as : Lubricant. Solvent, Paint, Metallic compounds, Grease, etc... The thermal or photochemical decomposition products of these elements cumulate with the dusts and fumes emitted by the melting of the welding product. The solution to adopt must be, in any case, preceeded by a spot study. Refer to the document "Health and Safety in Welding" published by the International Institute of Welding (IIS/IIW).

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Toxicity information : Overexposure to welding fumes may cause : Pulmonary/bronchial disease and/or cause breathing difficulty.**Acute toxicity** : No data available.

SECTION 12 Ecological information

12.1. Toxicity

No data available.

12.2. Persistence - degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

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SECTION 12 Ecological information (continued)

12.6. Other adverse effects

No data available.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

Disposal : Dispose in a safe manner in accordance with local/national regulations.
Industrial waste number : 12 01 13 Welding wastes (Q8)
16 01 17 Ferrous metal (Q1).
16 01 18 Non-ferrous metal (Q1).

SECTION 14 Transport information

- ADR/RID : Not regulated.
- IMO-IMDG : Not regulated.
- IATA : Not regulated.

SECTION 15 Regulatory information

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

Directive RoHS 2011/65 : Can be used in the fabrication of electric and electronic devices

15.2. Chemical Safety Assessment

Not required.

SECTION 16 Other information

Warning : Fumes and gases emitted during welding may be dangerous. Good ventilation of the workplace required.

Text of R-Phrases in § 3 : R15 : Contact with water liberates highly flammable gases.
R17 : Spontaneously flammable in air.
R36/38 : Irritating to eyes and skin.

Further information : H250 - Catches fire spontaneously if exposed to air.
H260 - In contact with water releases flammable gases which may ignite spontaneously.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Training advice : Ensure that user is aware of the potential hazards and knows what to do in the event of an accident or an emergency.

Recommended uses and restrictions : Contact your supplier in case of doubt.

The contents and the format of this safety data sheet comply with Regulation (EC) No 1907/2006 of the European Parliament.

DISCLAIMER OF LIABILITY : The information in this sheet is based on the knowledge available when it was published. The user must ensure that the information is applicable and exhaustive for the application. The information contained in this sheet is only applicable for this product. The product must not be used for any application that is not allowed, in this case we will not be responsible for any damage caused. The user must respect current Safety, Health and Environmental legislation. This information concerns Safety and is not a substitute to the technical data of the product. This sheet cancels and replaces the previous ones.

End of document

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