



ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

**1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

Product Name Siftrode 6013-R Mild Steel Electrodes  
 Product code RE80[20/25/32/40][25/50]  
 CAS No. Not applicable.  
 EC No. Not applicable.  
 REACH Registration No. Not known.

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

Identified Use(s) SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites  
 SU15 Manufacture of fabricated metal products, except machinery and equipment  
 PC38 Welding and soldering products (with flux coatings or flux cores.), flux products  
 Uses Advised Against None known.

**1.3 Details of the supplier of the safety data sheet**

Supplier Weldability Sif  
 Company Identification Peters House,  
 Address of Supplier Orbital Centre,  
 Icknield Way,  
 Letchworth Garden City,  
 Hertfordshire, UK.  
 Postal code SG6 1ET  
 Telephone: +44 (0) 870 330 7757  
 Fax +44 (0) 800 970 7757  
 E-mail service@weldability-sif.com  
 Office hours

**2. SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

Regulation (EC) No. 1272/2008 (CLP) Not classified as dangerous for supply/use.

**2.2 Label elements**

According to Regulation (EC) No. 1272/2008 (CLP)  
 Product Name Siftrode 6013-R Mild Steel Electrodes  
 Hazard Pictogram(s) None.  
 Signal Word(s) None.  
 Hazard Statement(s) None.  
 Precautionary Statement(s) None.

**2.3 Other hazards**

Welding fumes: May result in discomfort such as dizziness, nausea, or dryness of irritation of nose, throat or eyes. Dust may have irritant effect on skin, eyes and air passages.

**2.4 Additional Information**

None.

**3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Not applicable.

**3.2 Mixtures**

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
iron	7439-89-6	231-096-4 01-2119462838-24-0000	62.0- 67.0	Not classified	
titanium dioxide	13463-67-7	236-675-5	14-18	Not classified	
silicon dioxide	7631-86-9	231-545-4	<7	Not classified	
Cellulose	9004-34-6	232-674-9	3.0-5.0	Not classified	
Fluorite (CaF <sub>2</sub> )	14542-23-5	238-575-7	<2.0	Not classified	
manganese	7439-96-5	231-105-1 01-2119449803-34-0000	1.5-2.0	Not classified	
aluminium silicate	12141-46-7	235-253-8	1.0 - 1.5	Not classified	

**4. SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

Inhalation If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact Wash skin with water.

Eye Contact Flush eyes with water for at least 15 minutes.

Ingestion Wash out mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed**

Irritant effect on eyes, skin and air passages.

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

Treat symptomatically.

**5. SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

Suitable Extinguishing media In case of fire use carbon dioxide or dry agent. In case of major fire and large quantities: Water jet spray, Foam.

Unsuitable extinguishing media None known.

**5.2 Special hazards arising from the substance or mixture**

None anticipated. Heating may cause decomposition.

**5.3 Advice for firefighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

**6. SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Wear protective gloves.

**6.2 Environmental precautions**

Do not release large quantities into the surface water or into drains.

**6.3 Methods and material for containment and cleaning up**

Sweep spilled substances into containers if appropriate moisten first to prevent dusting. Use vacuum to remove dust directly during formation.

**6.4 Reference to other sections**

See Also Section 8, 13.

**7. SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Provide adequate ventilation. Avoid dust generation. Wear gloves, eye protection and an approved dust mask if dust is generated during handling. Wash hands thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities**

Storage temperature: Ambient.  
Storage life: Stable under normal conditions.  
Incompatible materials: None anticipated.

**7.3 Specific end use(s)**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites  
SU15 Manufacture of fabricated metal products, except machinery and equipment  
PC38 Welding and soldering products (with flux coatings or flux cores.), flux products

**8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Manganese and its inorganic compounds (as Mn)	7439-96-5		0.5			
Calcium carbonate inhalable dust	1317-65-3		10			
Calcium carbonate respirable dust	1317-65-3		4			
Limestone total inhalable	1317-65-3		10			
Limestone respirable	1317-65-3		4			
Marble total inhalable	1317-65-3		10			
Marble respirable	1317-65-3		4			
Silica, amorphous inhalable dust	7631-86-9		6			
Silica, amorphous respirable dust	7631-86-9		2.4			
Titanium dioxide total inhalable	13463-67-7		10			
Titanium dioxide respirable	13463-67-7		4			
Cellulose inhalable dust	9004-34-6		10		20	
Cellulose respirable dust	9004-34-6		4			

Region: Europe, United Kingdom, Remark  
Source: EU Occupational Exposure Limits, Workplace Exposure Limits (WEL), Notes

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls: Ensure adequate ventilation.  
8.2.2. Personal protection equipment



Eye Protection



Skin protection: Wear suitable gloves if prolonged skin contact is likely.



Respiratory protection: Welding fumes: A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards: Burn hazard/ radiated heat UV/IR : Wear insulating gloves EN407 (heat). Safety spectacles/goggles/full face shield.

8.2.3. Environmental Exposure Controls: Do not release large quantities into the surface water or into drains.

**9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance	Solid.
	Colour : Grey.
Odour	Characteristic.
Odour threshold	Not established.
pH	Not known.
Melting point/freezing point	>1300°C
Initial boiling point and boiling range	Not applicable.
Flash Point	app. 3000°C
Evaporation rate	Not known.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not available.
Relative density	Not available.
Solubility(ies)	Solubility (Water) : Insoluble. Solubility (Other) : Insoluble.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not available.
Viscosity	Not known.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

**9.2 Other information**

None.

**10. SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

Stable under normal conditions.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose.

**10.4 Conditions to avoid**

None anticipated.

**10.5 Incompatible materials**

None anticipated.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**11. SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute toxicity - Ingestion	Not classified.
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Not classified. Dust may cause irritation.
Serious eye damage/irritation	Not classified. Welding fumes: May result in discomfort such as dizziness, nausea, or dryness of irritation of nose, throat or eyes. Dust may cause irritation.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	Not classified. Welding fumes: May result in discomfort such as dizziness, nausea, or dryness of irritation of nose, throat or eyes. Dust may cause irritation.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

**11.2 Other information**

The following table shows the risk factors that may occur during welding. In the table are given the maximum values of the individual elements and chemical compounds in the workplace.

Gases	CAS	MAK ml/m <sup>3</sup>	MAK mg/m <sup>3</sup>	ACGIH TLV mg/m <sup>3</sup>
Carbon dioxide CO <sub>2</sub>	124-38-9	5.00	9.000	5.000
Carbon monoxide CO	630-08-0	30	33	25
Dinitrogen tetraoxide N <sub>2</sub> O <sub>4</sub>	10544-72-6	-	-	3
Hydrogen fluoride HF	7664-39-3	-	-	25
Nitrogen monoxide NO	10102-43-9	25	30	3
Nitrogen dioxide NO <sub>2</sub>	10102-44-0	5	9	0.1
Ozone O <sub>3</sub>	10028-15-6	0.1	0.2	0.1
Phosgen COCL <sub>2</sub>	75-44-5	0.1	0.4	0.3
Formaldehyde CH <sub>2</sub> O	50-00-0	0.5	0.6	-

Fumes and dusts	CAS	MAK mg/m <sup>3</sup>	ACGIH TLV mg/m <sup>3</sup>
Fluorides (calcium as fluorine)	778-75-5	2.5 (total dust)	2.5 total dust
Chromium (VI) compounds	1333-82-0	0.1 (total dust)	0.5 total dust as Cr
Copper oxide	7440-50-8	0.1 (total dust)	0.2 dym
Manganese oxide	7439-96-5	0.5 (total dust)	0.2 dym
Nickel N	7440-02-0	0.1 (total dust)	0.1 total dust
Nickel oxides (Ni).Ni <sub>2</sub> O <sub>3</sub>	1313-99-1;1314-06-3	0.5 (total dust)	-
Molybdenum compounds	7439-98-7	5 (total dust)	5 total dust
Beryllium oxide BeO	1304-56-7	0.002 (total dust)	-
Cadmium oxide CdO	1306-19-0	0.03 (total dust)	0.01 total dust
Cobalt oxide CoO	1307-96-6	0.1 (total dust)	-
Vanadium (V) oxide	1314-62-1	0.05 (respirable dust)	-
Zinc oxide ZnO	1314-13-2	5 (respirable dust)	-
Silicium dioxide SiO <sub>2</sub>	7631-86-9	0.1 (respirable dust)	0.1 respirable dust

MAK – maximum workplace concentration in Germany

**12. SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

**12.2 Persistence and Degradation**

No information available.

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

The product has high mobility in soil.

**12.5 Results of PBT and vPvB assessment**

Not classified as PBT or vPvB.

**12.6 Other adverse effects**

Not known.

**13. SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Disposal should be in accordance with local, state or national legislation.

**13.2 Additional Information**

None.

**14. SECTION 14: TRANSPORT INFORMATION****Not classified as hazardous for transport.****15. SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

REACH: ANNEX XIV list of substances subject to authorisation Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

silicon dioxide (7631-86-9), titanium dioxide (13463-67-7)

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

**16. SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements:

**LEGEND**

Hazard Pictogram(s) None.

Hazard Statement(s) None.

Precautionary Statement(s) None.

Acronyms

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

vPvB : very Persistent and very Bioaccumulative

Disclaimers Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Weldability Sif gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Weldability Sif accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.