Product Safety Information
in dependence to 453 / 2010 / EC

HILCO FER SG2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the product	:	Solid.
Company identification	:	Hilarius Haarlem Holland B.V. Emrikweg 7 2031 BT Haarlem Tel.: +31 (0) 23 531 91 00 www.hilco-welding.com / info@hilco-welding.com
Trade name	:	FER SG2
Typ of product	:	welding wire
Use	:	for professional use only.

2. HAZARD IDENTIFICATION

By delivery	:	not hazardous.
Risk by welding use		
- General	:	electric shock.
- Inhalation	:	Inhalation of welding fumes may cause respiratory irritation. Different kinds of fume and dust occur during the welding and grinding process. Overexposure to welding fumes may cause: Fever, Nausea, Giddiness, Eye irritation. Irritation to the respiratory tract and to other mucous membranes. Pulmonary/bronchial disease and/or cause breathing difficulty. Overexposure to Manganese (Mn). May attack the nervous system and/or aggravate pre-existing disorders. The primary entry route for welding fumes and gases is by inhalation. Bronchitis and some lung fibrosis have been reported.
- Skin contact	:	UV, IR radiations. Heat. May produce skin irritation.
- Eye contact	:	UV, IR radiations. Heat. May cause eye irritation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

This product is not considered to be hazardous and does not contain hazardous components.

Substance name		Value(s)	CAS No./EC No./EC Index	Symbol(s)	R-Phrase(s)
Iron	:	ca. 97 %	7439-89-6 / 231-096-4 / -----		
Manganese	:	ca. 1,30 -1,60 %	7439-96-5 / 231-105-1 / -----		
Silicon	:	ca. 0,70 - 1,00 %	7440-21-3 / 231-130-8 / -----		

4. FIRST AID MEASURES

First aid		
- Inhalation	:	Assure fresh air breathing.
- Skin contact	:	Stop exposure.
- Eye contact	:	Minimize exposure to light.
- Ingestion	:	Ingestion unlikely. Rinse mouth.
- Elektric shock	:	Electrical circuits must be shut off as soon as possible. Prepare to administer resuscitation in case of cardiac or respiratory failure. In case of respiratory arrest, administer artificial respiration.
General information	:	In all case: Obtain medical attention. If possible show this sheet.

5. FIRE-FIGHTING MEASURES

Flammable class	:	The product is not flammable.
Prevention	:	Welding hot slag or sparks may cause fire. Keep away from combustible material.
Surrounding fires	:	Use water spray or fog for cooling exposed containers.
Protection against fire	:	Wear proper protective equipment.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Equip clean-up crew with proper protection.
After spillage and/or leakage	:	On land, sweep or shovel into suitable containers.

7. HANDLING AND STORAGE

Storage	:	Store in dry protected location to prevent any moisture contact. Keep Container closed when not in use.
Handling	:	Wash hands and other exposed areas with mild soap and water before Eating, drinking or smoking and when leaving work.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection	:	Bevor any use, it is necessary to attentively read the safety data sheet of the protection gas linked to the wire.
- Respiratory protection	:	Do not breathe gas/fumes/vapour. In case of insufficient ventilation, wear suitable respiratory equipment.
- 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.
- Ingestion	:	When using, do not eat, drink or smoke.
Industrial hygiene	:	Provide local exhaust or general room ventilation to minimize fumes concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	Solid.
Colour	:	Copper.
Odour	:	Odourless.
Melting point [°C]	:	ca. 1500

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.
Hazardous decomposition products : Formation of dangerous fumes during use.
According to process conditions, hazardous decomposition products may be generated. Such as:

Al2O3	CAS 001344-28-1	EC 215-691-6	TLV (mg/m3):	10
CO	CAS 000630-08-0	EC 211-128-3	TLV (mg/m3):	29
CO2	CAS 000124-38-9	EC 204-696-9	TLV (mg/m3):	-
CaO	CAS 001305-78-8	EC 215-138-9	TLV (mg/m3):	2 (Ca)
Cr	CAS 007440-47-3	EC 231-157-5	TLV (mg/m3):	0.5
Fe	CAS 007439-89-6	EC 231-096-4	TLV (mg/m3):	1 (insoluble)
F	CAS 007789-96-5	EC 232-188-7	TLV (mg/m3):	2.5
MgO	CAS 001309-48-4	EC 215-171-9	TLV (mg/m3):	10
Mn	CAS 007439-96-5	EC 231-105-1	TLV (mg/m3):	0.2
Mo	CAS 007439-98-7	EC 231-107-2	TLV (mg/m3):	10
NO2	CAS 010102-44-0	EC 233-272-6	TLV (mg/m3):	-
Ni	CAS 007440-02-0	EC 231-111-4	TLV (mg/m3):	1 (insoluble)
Ni	CAS 007440-02-0	EC 231-111-4	TLV (mg/m3):	0.05 (soluble)
O3	CAS 010028-15-6	EC 233-069-2	TLV (mg/m3):	-
PbO	CAS 001317-36-8	EC 215-267-0	TLV (mg/m3):	0.05
Si	CAS 007440-21-3	EC 231-130-8	TLV (mg/m3):	10 (SiO2)
SiO2	CAS 014808-60-7	EC 238-878-4	TLV (mg/m3):	10
TiO2	CAS 013463-67-7	EC 236-675-5	TLV (mg/m3):	10
Cr (III)	CAS 012018-00-7	---------	TLV (mg/m3):	0.5
Cr (VI)	CAS 001308-39-9	---------	TLV (mg/m3):	0.05
K2O	CAS 012136-45-7	---------	TLV (mg/m3):-	
Na2O	CAS 001313-59-3	---------	TLV (mg/m3):	2 (NaOH)
BaO	CAS 001304-28-5	---------	TLV (mg/m3):	0.5 (Ba)

: Theshold Limit Values (TLV-TWA) given according to ACGIH.
The TLV limit of the above elements is function of the national reglementation.

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Hazardous properties	:	Welding fumes are classified carcinogen by the ICRC (International Center of Research on Cancer) Group : 2 B. Cancer suspected agent.
Materials to avoid	:	Avoid contacth with: Acids. Oxidizing agent.
Other information	:	In case of work on parts covered by coatings such as: Lubricant, Grease, Paint, Solvent, Metallic compounds, etc.. The thermal or photochemical Decomposition products of these elements cumulate with the dusts and fumes emitted by the melting of the welding products. 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).

11. TOXICOLOGICAL INFORMATION

Toxicity information	:	This material or its emissions may induce an allergic or sensitization Reaction and thereby aggravate existing systemic disease.
Acute toxicity	:	---

12. ECOLOGICAL INFORMATION

Ecological effects	:	This product contains no hazardous components fort he environment. Avoid release to the environment.
Information		

13. DISPOSAL CONSIDERATIONS

Disposal	:	Comply with local regulations for disposal.
Industrial waste number	:	120101 Ferrous metallic scraps. 120113 welding wastes

14. TRANSPORT INFORMATION

General information	:	Not regulated.

15. REGULATORY INFORMATION

Symbol(s)	:	None.
R-Phrase(s)	:	None.
S-Phrase(s)	:	None.

16. OTHER INFORMATION

Warning	:	Fumes and gases ermitted during welding may be dangerous. Good ventilation of the workplace required. Electric rays may burn eyes and skin. Electric shocks can kill. Wear proper protective equipment.
Directive 2002/95/CE (ROHS):		Can be used in the fabrication of electric and electronic devices.
Training advice	:	Ensure that user is aware of the potential hazards and knows what tot do in the event of an accident or an emergency.
Recommended uses and restrictions	:	Contact your supplier in case of doubt.

The present Product Safety Information has been inspired by the European Directives currently in force.