SAFETY DATA SHEET



1. PRODUCT AND COMPANY IDENTIFICATION

Product name : HILCO Nickel Iron

Supplier : Hilarius Haarlem Holland B.V.

P.O. Box 550 - 2003 RN Haarlem

The Netherlands

Phone +31-(0) 23-531 91 00 Fax +31-(0) 23-532 59 06

2. COMPOSITION / INFORMATION ON INGREDIENTS

Description : covered electrode for manual metal arc welding

Composition :

Material	CAS number	Weight %	Material	CAS number	Weight %
С	7440-44-0	0,90	Fe	7439-89-6	bal.
Mn	7439-96-5	0,80			
Si	7440-21-3	0,70			
Ni	7440-02-0	53,00			

3. HAZARDS IDENTIFICATION

The product is harmless as it is. Dangers when used: • UV and infrared radiation • Fumes and dust • Electric shocks can kill.

4. FIRST AID MEASURES

In emergencies, call for medical assistance. Give first aid at the site of the accident as recommended by the Red Cross. For specific exposure routes the following can be considered as a general guideline for first aid:

Inhalation : breathe fresh air - call for medical assistance after excessive inhalation Skin contact : contaminated skin should be carefully washed - in case of arc burns apply a

cold clean dressing and call for medical assistance

Eye contact : rinse the eyes with fresh water - call for medical assistance

Ingestion : not applicable

5. FIRE FIGHTING MEASURES

No specific requirements are applicable. The product is inflammable as it is. In case of fire caused by welding all kinds of fire extinguishers can be used.

6. ACCIDENTAL RELEASE MEASURES

Personal and environmental precautions are not applicable. Clean up mechanically.

7. HANDLING AND STORAGE

The packed filler metals are not subject to any additional product-related restrictions with regard to a possible health risk.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The product should always be applied using safe and controlled equipment. It is furthermore important to read and understand the instructions of the manufacturer / supplier, recommended methods of procedure and all warning labels and supplements. Personal protection measurements:

Ventilation : use enough ventilation, exhaust the arc locally, keep your head out of the fumes

Inhalation : should be avoided, keep your head out of the fumes

Eye protection : wear a helmet or use face shield with filter lens shade number 14 or darker

Ear protection: use ear protectors and / or earplugs

Skin protection: wear appropriate hand, head and body protection, which helps to prevent injury

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : covered rod Safety relevant data : not applicable

10. STABILITY AND REACTIVITY

Conditions to avoid : the product is stable under normal operating conditions

Materials to avoid : not applicable

Hazardous decomposition: welding fumes and gases of which the nature and quantity depend on the process, the base material, the product itself and the parameters applied. Furthermore protective coatings on the base material can influence the composition and volume of the fumes and gases to which the user may be exposed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : in state as delivered: not known

Local effects : not relevant

Sensitisation : sensitisation by skin contact is possible, wear appropriate gloves

Additional indications : the inhalation of dust and fumes can damage health and should, thus, be

avoided by sufficient ventilation and / or extraction.

12. ECOLOGICAL INFORMATION

There are no known harmful environmental effects caused by the product in terms of form and characteristics supplied. The product should be used to good working practice, taking care not to release the product into the atmosphere. Collect all machining waste, including empty packaging, and make arrangements for correct disposal.

13. DISPOSAL CONSIDERATIONS

The disposal and possible recycling of the material must be carried out according to the standard applicable to any other metallic material.

Recommendation : scrap metal according to the local regulations. Dust and particles separated

in a fume exhaust should be treated as special waste.

Packing material : recycling according to the local regulations.

14. TRANSPORT INFORMATION

The product, as it is, is not harmful in view of any international transport regulation.

15. REGULATORY INFORMATION

It must be observed that regulations are always subject to the local situation. With regard to the product as it is there are no known local and EU regulations.

With regard to the usage of the product a warning is applied on the packing stating:

"WARNING - take precautions when welding. Observe your employers' safety instructions, which should be in accordance with national laws / regulations and which should be based on data available from your supplier."

16. OTHER INFORMATION

Hilarius Haarlem Holland B.V. requests the users of this product to read this safety data sheet carefully and become aware of the risks implied with the use of this product. The user is requested to provide any this safety data sheet to any person involved in using this product, to pass on this information to any customer who may use this product and / or distribute this product to any third user. It is furthermore recommended to train each user on the specific safety aspect of this product.

Note: This safety data sheet is developed following ISO 11014-1:1994 standard, which follows the SDS model, an outlined in EC Commission Directive 91/155/EC. All information in this safety data sheet is based on the present available knowledge and regulations. The information is subject to change without prior notice and can be considered as suitable for general guidance.

HILARIUS HAARLEM HOLLAND B.V.

Haarlem, 07.10.19