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## 1.- IDENTIFICATION OF PRODUCT AND COMPANY

**1.1 Product identification:** **COPPER-COATED CARBON GRAPHITE ELECTRODE**

**1.2 Identified Uses of the substance or mixture and uses that are advised against:** Arc cutting and welding

**1.3 Supplier's details:** CHAVES BILBAO S.L.,  
C/Bizkargi, 6 Pol. Ind. Sarrikola  
E-48195 LARRABETZU Bizkaia  
Tel. +34 94 412 34 56  
www.chavesbao.com

**1.4 Emergency telephone number:** Toxicology Information Service  
Telephone: Spain: **+34 91 562 04 20** (24/7/365)  
Other: [National support - Poison Centres \(europa.eu\)](#)

## 2.- IDENTIFICATION OF HAZARDS

**2.1 Product classification:** Unclassified product

**2.2 Label items:** This product does not require a label

**2.3 Other hazards:** N/A

## 3.- COMPOSITION

SUBSTANCE	CAS No. CE No.	Concentration	Classification	H/P Phrases
Graphite	7782-42-5 231-955-3	75%	-	-
Asphalt	1214-20-1 231-820-9	15%	-	-
Copper	7440-50-8 231-159-6	5%	-	-
Petroleum coke	-	5%	-	-

## 4.- FIRST AID

### 4.1 Description of first aid

No first aid measures should be necessary for unused electrodes.


In case of accident or a feeling of discomfort, seek immediate medical advice.

**Inhalation** Provide fresh air and keep the person warm and at rest. Request immediate medical help.

**Contact with the skin** Wash immediately with abundant water and soap. If irritation appears and persists, consult a doctor.

**Contact with the eyes** Rinse immediately with abundant water for 10 to 15 minutes, holding the eyelashes back. Request medical attention if the problem persists.

**Ingestion** Wash the mouth out immediately. Do not induce vomiting. Request medical attention if the problem persists.

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#### 4.2 Main symptoms and acute and delayed effects:

No specific symptoms.

#### 4.3 Indication of all medical assistance and special treatments that must be provided immediately.

No special measures are required. Treat the symptoms.

### 5.- FIRE FIGHTING MEASURES


- 5.1 Extinguishing means:** The extinguishing measures must be chosen based on the surrounding area. The product is not combustible in itself. Appropriate means: pulverised water, high-power jet, carbon dioxide, foam, dry extinguishing powder.
- 5.2 Specific hazards arising from the substance or mixture:** This product does not burn. However, the welding arcs and sparks can set fire to combustible, inflammable materials.
- 5.3 Recommendations for fire fighting personnel:** Use personal respiration devices. Collect the extinguishing water separately to avoid drainage into the rainwater or surface water collection system.

### 6.- MEASURES IN THE EVENT OF ACCIDENTAL SPILLAGE

- 6.1 Personal precautions, personal protective equipment and emergency procedures:** General local ventilation and extraction of fumes must be appropriate to keep the fume concentrations below the safety limits.  
See section 8.
- 6.2 Precautions in relation to the environment:** Do not tip down drains or dispose of in aquatic environments. Do not allow to enter the soil/subsoil. See section 13
- 6.3 Methods and means of contention and cleaning:** N.A.
- 6.4 Reference to other sections:** See section 8/13.

### 7.- HANDLING AND STORAGE

- 7.1 Precautions for safe handling:** Ensure adequate ventilation. Use respiratory equipment to weld in confined spaces. Use appropriate protective clothing and eye protection for arc welding. Remove all flammable materials and liquids before welding.  
Wash your hands before breaks and immediately after handling the product.
- 7.2 Safe storage conditions, including possible incompatibilities:** Store in a dry, well-ventilated room. Do not store welding consumables directly on the ground or next to walls. Store well away from chemical substances such as acids that could cause chemical reactions.
- 7.3 Specific end uses:** Arc welding

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## 8.- EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 General controls:

Unless indicated to the contrary, all values are for weighted averages in an 8 hour period (TWA)

#### **National limits for exposure during work (2018)**

Substance	CAS NO.	Source:	Daily Exposure Values (VLA-ED)	Short Exposure Value (VLA-EC)
Graphite	7782-42-5	National Institute for Health and Safety at Work	2mg/m <sup>3</sup>	-
Copper ( <i>fumes</i> )	7440-50-8	National Institute for Health and Safety at Work	0.2mg/m <sup>3</sup>	-
Copper ( <i>powder and mist</i> )	7440-50-8	National Institute for Health and Safety at Work	1mg/m <sup>3</sup>	-

General local ventilation and extraction of fumes must be appropriate to keep the fume concentrations below the safety limits. The technical measures and application of appropriate work methods are prioritised over the use of personal protective equipment. Wash hands in breaks and upon finishing work.

### 8.2 Personal protection

Use a mask with ventilation when working or welding in reduced spaces, or where the ventilation is not sufficient to keep the exposure values within the safety limits. Use certified protective gloves and airtight protection goggles.

To protect yourself from direct contact with the skin, it is essential to use additional protective clothing on top of normal work clothing.

## 9.- PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

Appearance: Solid, metal

Colour: Not relevant

Density: Not relevant

Melting point: Carbon 3527°C; Copper 1084°C


Boiling point: Carbon 4027°C; Copper 2927°C

### 9.2 Other data:

-

## 10.- STABILITY AND REACTIVITY

<b>10.1 Reactivity:</b>	Does not react dangerously with other substances under normal conditions.
<b>10.2 Chemical stability:</b>	Stable product under normal conditions.
<b>10.3 Possibility of dangerous reactions:</b>	None known.
<b>10.4 Conditions that must be avoided:</b>	None under normal conditions.
<b>10.5 Incompatible materials:</b>	Strong oxidising agents.
<b>10.6 Hazardous decomposition products:</b>	Carbon oxides.

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## 11.- TOXICOLOGICAL INFORMATION

### 11.1 Information on the toxicological effects

Acute toxicity	Unclassified
Chronic toxicity	Unclassified

### 11.2 Irritation

Irritating effect on the skin	Unclassified
Irritating effect in the eyes	Unclassified
Irritating effect on the digestive tract	Unclassified
Corrosiveness	Unclassified

### 11.3 Awareness

Awareness	Unclassified
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### 11.4 Toxicity due to repeated doses

Toxicity	Unclassified
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### 11.5 CMR effects

Carcinogenicity	No indication of carcinogenicity.
Mutagenicity	No indication of mutation in human germ cells.
Reproductive toxicity	No indication of carcinogenicity.

## 12.- ECOLOGICAL INFORMATION

Exotoxicity	No available data
Persistence and biodegradability	The methods to determine biodegradability do not apply to inorganic substances.
Bioaccumulative potential	No available data
Mobility in the ground	No available data
PBT/mPmB	No available data
Other adverse effects	No available data


## 13.- CONSIDERATIONS IN RELATION TO DISPOSAL

### 13.1 Methods for the treatment of waste:

Dispose of any product, waste or packaging material in accordance with local and national regulations. Worn fume extraction filters must be disposed of as hazardous waste. Do not tip down drains or dispose of in aquatic environments. Do not allow to enter the soil/subsoil.

### 13.1 Methods for the treatment of packaging waste

In accordance with local and national regulations.

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## 14.- INFORMATION IN RELATION TO TRANSPORT

### 14.1 Land transport (ADR/RID)

Name	No
UN number	No

### 14.2 Sea transport

Name	No
UN number	No

### 14.3 Hazard classes for transport

Not applicable

### 14.4 Packaging group

Not applicable

### 14.5 Environmental hazards

Not applicable

### 14.6 Particular precautions for users

Not applicable

### 14.7 Bulk transport in accordance with annex II of the MARPOL Convention and IBC Code

Not applicable

## 15.- REGULATORY INFORMATION

### 15.1 Specific regulation for health, safety and environment

#### **European Union**

Regulations (EC) No. 1907/2006 of the European Parliament and of the Council, of 18 December 2006, in relation to the registration, evaluation, authorisation and restriction of chemical substances (REACH). Commission Regulation (EU) 2015/830, of 28 May 2015, modifying Regulation (EC) no. 1907/2006.

Regulation (EC) no. 1272/2008 of the European Parliament and of the Council, of 16 December 2008 on classification, labelling and packaging of substances and mixtures, modifying and repealing Directives 67/548/EEC and 1999/45/EC and modifying Regulation (EC) No. 1907/2006

DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain directives

European Parliament and Directive 94/62/EC of the Council of 20 December 1994 on packaging and packaging waste.

## 16.- OTHER INFORMATION

The information on this Material Safety Data Sheet is based on the technical data held by Chaves Bilbao S.L. and which it believes to be reliable. Given that the conditions of use are out of our control, we take no responsibility in relation to the use made of this information, nor do we guarantee this in any way neither implicitly nor explicitly. In the event of the mixing or processing of the product, this information shall cease to be necessarily valid. For more information, please contact Chaves Bilbao S.L.