



SAFETY DATA SHEET

ELECTRODES RUTILE

Cod. 402 00 00300-513-2X300 mm.
Cod. 402 00 00400-521-2.5X300 mm.
Cod. 402 00 00500-539-3.25X450 mm.

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY.

PRODUCT NAME: ELECTRODES RUTILE

INTENDED USE: Covered electrodes for electric-arc welding of steels
not bound with
rutile covering.

NAME OF THE COMPANY: MECCANOCAR ITALIA S.R.L.
Capannoli (PI) 56033 Via S. Francesco 22
-TEL. 0587/609433 (10 lines R. A.)

2. COMPOSITION/INFORMATION ON INGREDIENTS

- No substances classifiable as dangerous according to the regulations quoted at point 16 are present.

3. DANGER IDENTIFICATION

- UV radiations, IR, heat deriving from the electric arc.
- Welding fumes.
- Electric shocks (as regards the process).
- Noise.

4. FIRST-AID MEASURES

Localisation	Effetti	Primo soccorso	Raccomandazioni
RESPIRATORY TRACT	Irritation and cough.	Take in a ventilated place.	
HANDS/SKIN	Erythema and pigmentation	Stop exposure.	In case of persistent effects ask for

	(delayed effect).		medical intervention and show this sheet.
EYES	Burning sensation.	Protect from light, wet with fresh water.	

5. FIRE-FIGHTING MEASURES

- **Product in stock:** not inflammable. Should the material be involved in a fire, use insulating respirators. NOTE: packaging materials are generally inflammable.
- **During the use:** make sure the use area is devoid of inflammable/explosive substances.
- **Extinguishing means:** no restriction.

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6. ACCIDENTAL RELEASE MEASURES

- **Environmental precautions:** reuse or disposal as to point 13.
- **Personal measures:** none.
- **Cleaning methods:** not applicable.

7. HANDLING AND STORAGE

Handling: no specific precaution before use. During the use work in a sufficiently ventilated area and/or provide the welding point with suitable protective means.

Storage: keep in a dry place.

8. EXPOSURE/PROTECTION (during the use).

During the use of the product there a release fumes occurs, which are dangerous to health if inhaled. Here below are reported the dangerous substances that can develop during the use of the product, with their limits of exposure (TLV). The presence and the concentration on the working place of other possible substances are directly linked to the base material, to its surface state (painting, galvanizing, oils, fat, etc.), to welding parameters and to the aeration conditions on the working place. The evaluation of the presence of dangerous substances must be carried out on the working place of the operator.

Substance	CAS #	TLV (mg/m3)
Iron (Fe) – soluble		1
Potassium soluble (K)	7440-09-7	Not foreseen
Sodium Soluble (Na)	7440-23-5	Not foreseen
Manganese (Mn)	7439-95-5	0,2
Calcium(Ca)	7440-70-2	2
Ozone (O3)	10025-15-5	0,20
Carbon oxide (CO)	630-08-0	29
Carbon dioxide (CO2)	124-38-9	9000
Nitrogen dioxides (NO2)	10102-44-0	5,6
Fumes from welding not	---	5

differently classified

N.B. TLV values are those indicated by ACGIH.

Considering what has been above-mentioned, work in a sufficiently ventilated place and/or provide the welding point with suitable personal protective means (see DPR 303/56, DLG 626/94 and DLG 277/91). IN PARTICULAR;

- a. **Respiratory protection:** avoid inhaling the welding fumes. In case of inadequate ventilation, provide the use area with suitable means of fumes suction.
- b. **Protection for hands:** use gloves for welders.
- c. **Protection for eyes:** use a protective mask with proper non-actinic glass. Avoid the use of contact lenses in the exposure area.
- d. **Protection for skin:** cover the exposed parts with suitable clothing.
- e. **Protection for the auditory apparatus:** use suitable protections.

Do not eat, do not drink nor smoke in the exposure area.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid.

Odour: odourless.

pH: n. a.

Melting point/interval: about 1500°C.

Boiling point/interval: n.a.

Flash point: n.a.

Inflammability: not inflammable.

Autoignition: not inflammable.

Explosive and/or comburent properties: none.

Specific weight: 5-8g/cm³.

Vapour pressure: not applicable.

Solubility: partial with acids and basis at heat.

Partition coeff. N-OTANOL/WATER: not applicable.

Others: //

10. STABILITY AND REACTIVITY

Conditions to avoid: stable product till 800°C.

Materials to avoid: contact with acid and oxidizing substances.

11. TOXICOLOGICAL INFORMATION

In case of uses out of control (see point 8).

- Brief and occasional: no harmful effect.
- Prolonged: chronic effects for eyes. Troubles to the auditory apparatus. Chronic and/or cancerogenic effects to skin and respiratory tract.

12. ECOLOGICAL INFORMATION

No harmful effects on the environment are known (avoid dispersing the product).
The emission in the atmosphere of the fumes arising from the use of the product is subject to the regulations in force.

13. DISPOSAL

Product: elimination as special not dangerous waste.
Packaging: if and where feasible use recycling procedures.

14. TRANSPORT

No specific precaution.

15. REGULATION INFORMATION

EEC Classification: not applicable.

Warning:

- Protect yourself and the other people.
- Read and understand this information.
- GASES and FUMES can be harmful for your health.
- THE ELECTRIC ARC can damage the eyes and burn the skin.
- ELECTRIC SHOCKS can kill.
- Before the use, read and understand the instructions by the producer, the safety data sheets of the product (SPP) and the procedures of your company concerning safety.
- Keep your head far from the fumes.
- Carry out a sufficient change of air and breathe with suitable means near the electric arc, so as to keep the gases and the fumes far both from the breathing area and the working area.
- Wear suitable protections for sight, hearing, body.
- Do not touch electric parts under tension.

SEE:

- American National Standard Z49, 1, "Safety in Welding, Cutting and Allied Processes", published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126.
- OSHA "Safety and Health Standards, 29 CFR 1910, available by the U.S. Government Printing Office, Washington, D.C. 20402.
- Possible national or local regulations, if applicable.

DATA CONCERNING LAW REGULATIONS IN ITALY.

All the other national and local regulations, if applicable to the use, the transport or the disposal of this product, must be complied with.

16. FURTHER INFORMATION

Training: the user must be properly trained in order to avoid the improper use of the product.

Use: follow the instructions reported on the containers and their technical-commercial brochures.

Data sources: technical literature and laboratory data kept by the producing plant.

Note on the drawing-up: this sheet was drawn up according to the requirements fixed by DLG 03.02.97 n° 52, DM 14.04.97, DLG 16.07.98 n° 256 and Dir. 93/112/CEE.

The indications of the Information Sheets on fumes from welding published by the International Welding (IIW) Institute were also taken into consideration, which are available by the Italian Institute on Welding in Genoa.

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The information reported here are those by qualified experts. The information in the document are updated to the date above reported. Since the use of this information and the use conditions of the product are not under the control of our company, the user is obliged to determine the conditions for the use of the product under a safety system.

Meccanocar italia s.r.l.

26/05/2015 RI. SVI.

Meccanocar Italia S.r.l.

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