

SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

PRODUCT NAME: Welding Electrodes
PART NO: 3050550, 3050555, 3050560, 3050565
COMPANY IDENTIFICATION: CLARKE INTERNATIONAL,
HEMNALL STREET, EPPING, ESSEX. CM16 4LG
BUSINESS TELEPHONE: 01992 565300
BUSINESS FAX: 01992 561562
EMERGENCY TELEPHONE: 020 89887400

2. COMPOSITION/INFORMATION ON INGREDIENTS:

Low alloy covered electrode ($\leq 5\%$ Cr; $\leq 1\%$ Ni; $\leq 1\%$ Co.). No substances classifiable as toxic and/or noxious.

Electrode core low carbon steel: Fe > 99% Mn = 0,3 + 0,7%

Vitrified coating:

Rutile (TiO ₂)	= 60% Maximum
Silicate	= 30% Maximum
Iron alloy (Mn, Si)	= 15% Maximum
Carbonates	= 10% Maximum

3. HAZARDS IDENTIFICATION:

The product is harmless as it is. Dangers when used:

- A. UV and infrared radiation, heat and noise generated by the electric arc
- B. Fumes / Welding gases
- C. Electric shocks (welding systems)

4. FIRST AID MEASURES:

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Respiratory tract (fumes inhalation) Bring the injured person to a ventilated place
Hands/skin (burns, erythema) Stop exposure
Eyes (arc glow and/or fumes) Dampen with fresh water
Should symptoms persist, consult a physician

5. FIRE FIGHTING MEASURES:

No specific direction.

When using the product, keep flammable materials away from the work area.

6. ACCIDENTAL RELEASE MEASURES:

Avoid crushing of the vitrified coating.

7. HANDLING & STORAGE:

High-density solid product; avoid storing in unstable positions; handle with care; protect your hands and feet.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

Fumes and welding gases are developed when using the product; operate in a sufficiently ventilated place and/or install fumes extractors on the welding area.

<u>Name</u>	<u>N° CAS</u>	<u>TLV mg/m³</u>
Mn and inorganic compounds (as Mn)	7439-96-5	0,2
Si oxides (as Si fumes)	69012-64-2	2
Fe oxides, powders and fumes (as Fe)	1309-37-1	5
Welding fumes (NOC)		5
Titanium dioxide	13463-67-7	10
Insoluble breathable particles (PNOC)		3

Protective Measures:

Respiratory tract Avoid inhaling fumes/gases; be sure there is enough ventilation and/or fumes extractors are available
Ears Use ear protectors and/or ear plugs
Hands Use welding gauntlets
Eyes Use helmets with suitable shielding glass
Skin Cover exposed areas with appropriate clothing

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9. PHYSICAL AND CHEMICAL PROPERTIES:

A.	State	solid
B.	Smell	smell-less
C.	Melting point	= 1600°C
D.	Boiling point	n.a.
E.	Flash point	n.a.
F.	Explosive properties	none
G.	Specific weight	5 + 8 g/cm ³
H.	Solubility	in strong acids

10. STABILITY AND REACTIVITY:

A.	Stability	stable
B.	Reactivity	strong acids and bases

11. TOXICOLOGICAL INFORMATION:

The product is not toxic as it is; when in use, refer to items 3 and 8.

Prolonged operation causes chronic effects to eyes, ears and respiratory tract.

12. ECOLOGICAL INFORMATION:

Ferrous product; do not dispose of it in the environment (metal scrap). When used in combination with fumes extractors, treat the ensuing powders according to the provisions in force.

13. DISPOSAL CONSIDERATIONS:

- A. Product: ferrous scrap, disposable as such, raw material suitable for melting
- B. Cardboard and/or plastic packing: to be recycled according to the provisions in force.

14. TRANSPORT INFORMATION:

High-density product, not dangerous according to the transport provisions in force.

15. REGULATORY INFORMATION:

A.	CE Classifications	n.a.
B.	Risk symbol	n.a.
C.	Risk phrases	n.a.

16. OTHER INFORMATION:

This information has been drawn up in consideration of the directions contained in the information cards on welding fumes, published by the International Institute of Welding (IIW).

Possible national and local provisions are enforceable. The values which are shown in this document refer to security, so they are not warranted for product's technical characteristics.

They are based on the best present knowledge.

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