

**MATERIAL SAFETY DATA SHEET**

**1. IDENTIFICATION**

<b>Manufacturer/Supplier Name</b> WWS Weldability	<b>Telephone Number</b> 01462 482200
<b>Address:</b> Peters House, Orbital Centre, Icknield Way, Letchworth Garden City, Hertfordshire, SG6 1ET	
<b>Product Type:</b> Coated electrode for manual arc welding. In accordance to EC Directive no. 92/32/CEE, 91/155/CEE, 88/379/CEE, 93/112/CEE.	
<b>Trade Name</b> Weldability 6013	<b>AWS Classification/Part number</b> TX60132050- TX60135050

**2. COMPOSITION/INFORMATON ABOUT INGREDIENTS**

Low-alloy electrode (Welds metal containing <5% Cr, <1% Ni, <1% Co). No substances classifiable as toxic and/or noxious.

Core = Carbon Steel:	Fe > 99%	Mn = 0.3 + 0.7%%
Verified Coating	Rutile (Ti o2)	=60% Max
	Silicates	=30% Max
	Ferroalloy (Mn Si)	=10% Max
	Carbonates	=5% Max

**3. IDENTIFICATION OF DANGERS**

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

- UV and Infrared radiation, heat and noise generated by electric arc.
- Fumes/Welding gases.
- Electric Shocks (Welding Systems)

**4. FIRST-AID MEASURES (DURING USE)**

Respiratory Tract	(Fumes inhalation)	Bring the injured person to a ventilated place
Hands/Skin	(Burns, erythema)	Stop exposure
Eyes	(Arc glow &/or fumes)	Dampen with fresh water

Should symptoms persist, consult a physician.

**5. FIRE PREVENTION MEASURES**

No specific direction. When using the product, keep flammable materials away from the work area.

**6. MEASURES IN CASE OF ACCIDENTAL LEAKAGE.**

Not applicable.

**7. HANDLING AND STORAGE**

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



## 8. EXPOSURE CONTROL/INDIVIDUAL PROTECTION (DURING USE)

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.

Name	CAS No	TLV mg/m3
Mn Oxides	743998-5	0.2
Si Oxides (as Si fumes)	69012-64-2	2
Fe Oxides	1309-37-1	5
Welding fumes – fire powders (NOC)		5
Titanium dioxide	13463-67-7	10
Breathable Particles (PNOC)		3

### Protective Measures:

Respiratory Tract	Avoid inhaling fumes/gases: be sure there is enough Ventilation and/or fume extractors are available.
Ears	Use ear protectors and/or earplugs.
Hands	Use welding gauntlets.
Eyes	Use helmets with suitable shielding glass.
Skin	Cover exposed areas with appropriate clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

State	Solid
Smell	Odourless
Melting point	1600oc
Boiling point	N.A.
Flash point	N.A.
Explosive Properties	None
Specific Weight	5+8g/cm3
Solubility	In Strong Acids

## 10. STABILITY AND REACTIVITY

Stability	Stable
Reactivity	Strong acids and bases

## 11. TOXICOLOGICAL INFORMATION

This 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 in the environment (scrap metal). When used in combination with fumes extractors, treat the ensuing powders according to the provisions in force.

## 13. CONSIDERATIONS ON DISPOSAL

Product ferrous scrap, disposal as such, raw material suitable for melting.  
Cardboard and/or plastic packaging; to be recycled according to provisions in force.

## 14. INFORMATION ON TRANSPORTATION

High-density product, not dangerous according to transport provisions that are in force

## 15. INFORMATION ON REGULATIONS

CE Classifications	N.A.
Risk Symbol	N.A.
Risk Phrases	N.A.

## 15. FURTHER INFORMATION

WWS Weldability requires that all customers read this product card carefully so as to be informed about the risks implied in the use of the product.

This card 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.