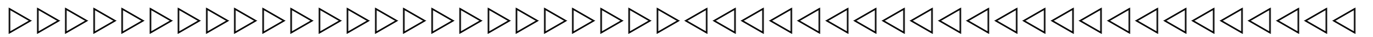


## Safety Data Sheet



### 1. PRODUCT AND COMPANY IDENTIFICATION:

**PRODUCT NAME:** 450 Cut Rod; Chamfer Rod (MX 414)

**MANUFACTURER:** Inweld Corporation  
3962 Portland Street  
Coplay, PA 18037  
USA Phone: 1-800-346-5368  
Fax: 1-877-346-5368  
E-mail: [Sales@InweldCorporation.com](mailto:Sales@InweldCorporation.com)

**EMERGENCY TELEPHONE NUMBER:** 1-800-424-9300 (Chemtrec)

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### 2. HAZARD IDENTIFICATION:

**Emergency Overview:** This product is normally not considered hazardous as shipped. Avoid eye contact or inhalation of dust from the product. When this product is used in a welding process, the most important hazards are welding fumes, heat, radiation and electric shock.

#### Classification of the Substance/Mixture

**CLP/GHS Classification (1272/2008):**

Skin Irritation, Category 2

Eye Damage, Category 1

Carcinogenicity, Category 2

**EU Classification (67/548/EEC):**

Corrosive (C), Harmful (Xn), Irritant (Xi), Carcinogen Category 3, R34, R40, R37

Labelling:



**Signal Word:** Danger

**Hazard Statements:**

H315 – Causes skin irritation.

H318 – Causes serious eye damage.

H351 – Suspected of causing cancer.

**Precautionary Statements:**

P201 – Obtain special instruction before use.

P202 – Do not handle until all safety precautions have been read and understood.

P264 – Wash skin and hair thoroughly after handling.

P280 – Wear protective gloves/eye protection/face protection.

P281 – Use personal protective equipment as required.

P302+P352 – IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 – If exposed or concerned: Get medical advice/attention.

P310 – Immediately call a POISON CENTER or doctor/physician.

P332+P313 – IF skin irritation occurs: Get medical advice/attention.

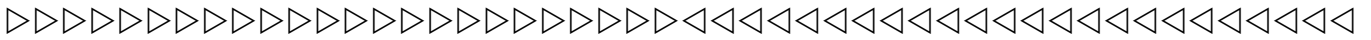
P362 – Take off contaminated clothing and wash before reuse.

P405 – Store locked up.

P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

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# Safety Data Sheet



### 3. COMPOSITION / INFORMATION ON INGREDIENTS:

Chemical Identity	CAS #	Range %	OSHA PEL (mg/m3)	ACGIH-TLV (mg/m3)	Carcinogenicity	EU Classification (67/548/EEC)	CLP/GHS Classification (1272/2008)
Cellulose	9004-34-6	10-20	NR	10	No	Not Dangerous	Not Hazardous
Iron Oxide	1317-61-9	1-11	15	10	No	(Xi) R36/37/38	(H315) Skin Irrit.. 2 (H319) Eye Irrit.. 2 (H335) STOT SE 3
#Manganese	7439-96-5	1-11	5	1	No	(Xn) R48	(H373) STOT RE 2
Titanium Dioxide	13463-67-7	1-11	15	10	No	Carc. Cat. 3 (Xn) R40	(H351) Carc. 2
Potassium Silicate	1312-76-1	1-11	NR	5	No	(Xi) R36/38	(H315) Skin Irrit.. 2 (H319) Eye Irrit.. 2
Sodium Silicate	1344-09-8	1-11	NR	5	No	(C) R34 (Xi) R37	(H314) Skin Corr. 1B (H335) STOT SE 3
Iron	7439-89-6	60-70	10 ( as Fe2O3 )	5 ( as Fe2O3 )	No	Not Dangerous	Not Hazardous

**Important:** This section covers the materials of which the products manufactured. The fumes and gases produced during normal use of this product are covered in section 10. The term "Hazardous" in "Hazardous Material" should be interpreted as a term required and defined in OSHA Hazard Communication Standard 29CFR 1910-1200 and it does not necessarily imply the existence of hazard. The chemicals or compounds reportable by Section 313 of SARA are marked by the symbol #.

### 4. FIRST AID MEASURES:

**Inhalation:** Remove to fresh air immediately or administer oxygen. Get medical attention immediately.  
**Skin:** Flush skin with large amounts of water. If irritation develops and persists, get medical attention.  
**Eye:** Flush eyes with water for at least 15 minutes. Get medical attention.  
**Ingestion:** Obtain medical attention immediately if ingested. Rinse mouth.  
**Electric Shock:** Disconnect and turn off the power. Use a nonconductive material to pull victim away from contact with live parts or wires. Immediately contact a physician.

### 5. FIRE-FIGHTING MEASURES:

**Suitable Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning material and fire situation.  
**Unsuitable Extinguishing Media:** Do not use water on molten metal. Large fires may be flooded with water from a distance.  
**Specific Hazards Arising From Chemical:** Keep away from heat/spark/open flames/hot surfaces – No smoking.  
 Iron oxides, Manganese/manganese oxides, Sodium oxides, Silicon oxides  
**Protective Equipment:** Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES:

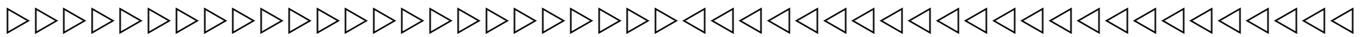
**Personal Precautions:** Refer to section 8.  
**Environment Precautions:** Refer to section 13.  
**Cleaning Measures:** Solid objects may be picked up and placed into a container. Liquids or pastes should be scooped up and placed into a container. Wear proper protective equipment while handling these materials. Do not discard as refuse.

### 7. HANDLING AND STORAGE:

**Precautions for Safe Handling:** Handle with care to avoid stings or cuts. Wear gloves when handling welding consumables. Avoid exposure to dust. Do not ingest. Some individuals can develop an allergic reaction to certain materials. Retain all warning and identity labels.



**Safety Data Sheet**



<b>Environmental Conditions</b>	<p style="text-align: center;"><b>Operation of machines</b></p> <ul style="list-style-type: none"> <li>• Oxygen cutting machines</li> <li>• Plasma cutting machines</li> <li>• Resistance welding machines</li> <li>• Machines for thermal spraying</li> <li>• Bench welding</li> </ul>
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<b>Class 2</b>	
<b>Impact of Spatter</b>	<b>25 Drops</b>
<b>Heat Transfer (radiation)</b>	<b>RHTI 24 ≥ 16 seconds</b>
<b>Process</b>	<p>Manual welding with heavy formation of spatter and drops</p> <ul style="list-style-type: none"> <li>• MMA welding (with basic or cellulose-covered electrodes)</li> <li>• MAG welding (with CO2 or mixed gases)</li> <li>• MIG Welding (with high current)</li> <li>• Self shielded flux core arc welding</li> <li>• Plasma cutting</li> <li>• Gouging</li> <li>• Oxygen cutting</li> <li>• Thermal spraying</li> </ul>
<b>Environmental Conditions</b>	<p style="text-align: center;"><b>Operation of machines</b></p> <ul style="list-style-type: none"> <li>• In confined spaces</li> <li>• At overhead welding/cutting or in comparable constrained positions</li> </ul>

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

- Appearance: Solid.
- Color: Black 1362/Green
- Odour: Odourless
- Odour Threshold: Not Available
- pH Value: Not Available
- Melting Point/Melting Range: 1560 - 2000° F, 850 - 1100° C
- Freezing Point: Not Available
- Boiling Point/Boiling Range: Not Available
- Flash point: Not Available
- Evaporation Rate: Not Available
- Self-in flammability: Not Available
- Explosion limits: Not Available
- Vapour pressure: Not Available
- Vapour density: Not Available
- Density at 20°C: Not Available
- Relative density: 6-9 g/cm<sup>3</sup>
- Solubility: Insoluble in water.
- Partition coefficient: Not Available
- Auto-ignition temperature: Not Available
- Decomposition temperature: Not Available
- Other Information: No available data.

**10. STABILITY AND REACTIVITY:**

- Chemical Stability:** This product is stable under normal conditions.
- Hazardous Reactions:** Contact with chemical substances like acids or strong bases cause generation of gas.



**Safety Data Sheet**



**Bio accumulative Potential:** Welding rods contain heavy metals which bio accumulates in the food chain. The following figures are the bio concentration factor (BCF) for the substances on their own.

- BCF:
- Iron, BCF: 140000
- Manganese, BCF: 59052

**Mobility in Soil:** Welding rods are not soluble in water or soil. Particles formed by working welding rods can be transported in the air.

**Other Adverse Effects:** In massive form, welding rods present no hazards to the aquatic environment. Welding materials could degrade into components originating from the materials used in the welding process. Avoid exposure to conditions that could lead to accumulation in soils or groundwater. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**13. DISPOSAL CONSIDERATIONS:**

- Product:** For product elimination, consult recycling companies or appropriate local authority.
- USA RCRA:** This product is not considered hazardous waste if discarded. Residue from welding consumables and processes could degrade and accumulate in soils and groundwater.
- Package:** May be disposed in approved landfills provided local regulations are observed.

**14. TRANSPORT INFORMATION:**

- UN-number:** Welding rods are not classified as dangerous goods for transport and has no UN number.
- UN proper shipping name:** Welding rods are not classified as dangerous goods for transport and has no UN proper shipping name.
- Transport hazard class:** Welding rods are not classified as dangerous goods for transport.
- Packing group:** There are not any special precautions with which a user should or must comply or be aware of in connection with transport or conveyance either within or outside premises.
- Environmental hazards:** Welding rods are not environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID and AND) and/or a marine pollutant to the IMDG Code.
- Special precautions for users:** There are not any special precautions which a user should or must comply or be aware of in connection with transport or conveyance either within or outside premises of the welding rod.
- Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code:** Welding rods in massive form do not subject under MARPOL 73/78 and the IBC Code. Not applicable – product is transported only in packaged form.

**15. REGULATORY INFORMATION:**

- Safety, health and environment regulations/legislation specific for the substance or mixture:** Read and understand the manufacturer's instructions, your employer's safety practices and the health and safety instructions on the label. Observe any federal and local regulations. Take precautions when welding and protect yourself and others.
- Warning:** Welding fumes and gases are hazardous to your health and may damage lungs and other organs. Use adequate ventilation. Electric shock can kill. Arc rays and sparks can injure eyes and burn skin. Wear correct hand, head, eye and body protection.
- Chemical safety assessment:** No
- USA:** Under the OSHA Hazard Communication Standard, this product is considered hazardous. This product contains or produces a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code § 25249.5 et seq.) United States EPA Toxic Substance Control Act: All constituents of this product are on the TSCA inventory list or are excluded from listing.
- EPCRA/SARA Title III Toxic Chemicals**
- The following metallic components are listed as SARA 313 "Toxic Chemicals" and potential subject to annual SARA reporting. See Section 3 for weight percentage.

Ingredient Name	Disclosure Threshold
Manganese	5 mg/m3

