

1. PRODUCT AND COMPANY IDENTIFICATION:**PRODUCT NAME:** Welding Rod Mild 6011**FORNEY SKUs UNDER SDS #:** 31101, 31105, 31125, 31201, 31205, 31210, 31225, 31250, 31305, 31310, 31350**MANUFACTURER:** Forney Industries, Inc.
2057 Vermont Dr.
Fort Collins, CO 80525
Phone: 800-851-6038
Fax: 970-498-9505
E-mail: customerservice@forneyind.com**EMERGENCY RESPONSE PHONE:** 1-800-535-5053**INTERNATIONAL EMERGENCY RESPONSE PHONE:** 352-323-3500**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:****Carcinogenicity, Category 1A****Labelling:****Symbols:****Signal Word:** Danger**Hazard Statements:**

H350 – May cause cancer.

Precautionary Statements:

P201 – Obtain special instructions before use.

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

P281 – Use personal protective equipment as required.

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

P405 – Store locked up.

Classification of the Substance/Mixture:**Specific Target Organ Toxicity (Single Exposure), Category 2****Specific Target Organ Toxicity (Repeated Exposure), Category 2****Acute Toxicity: Oral, Category 4****Labelling:****Symbols:****Signal Word:** Warning**Hazard Statements:**

H371 – May cause damage to organs.

H373 – May cause damage to organs through prolonged or repeated exposure.

H302 – Harmful if swallowed.

Precautionary Statements:

P260 – Do not breathe dust/fume/gas/mist vapours/spray.

P264 – Wash thoroughly after handling.

P270 – Do not eat, drink or smoke when using this product.

P309+P311 – IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

P405 – Store locked up.

P314 – Get medical advice/attention if you feel unwell.

P301+P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 – Rinse mouth.

Classification of the Substance/Mixture:

Aquatic Hazard (Long-Term), Category 3

Labelling:

Symbols: No pictogram

Signal Word: No signal word

Hazard Statements:

H412 – Harmful to aquatic life with long lasting effects.

Precautionary Statements:

P273 – Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

Chemical Identity	CAS #	Range %	OSHA PEL (mg/m3)	ACGIH-TLV (mg/m3)	Carcinogenicity	R-Phrase
Cellulose	9004-34-6	1-11	NR	10	No	
Potassium Titanate	12030-97-6	1-11	NR	NR	No	
Talc	14807-96-6	1-11	2.0	2.0	No	
Magnesium Carbonate	546-93-0	1-11	15	10	No	
#Manganese	7439-96-5	1-11	5	1	No	
Titanium Dioxide	13463-67-7	5-15	15	10	No	
Potassium Silicate	1312-76-1	1-11	NR	5	No	
Iron	7439-89-6	65-75	10 (as Fe2O3)	10 (as Fe2O3)	No	

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: No specific recommendations for welding consumables. 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: Not applicable

Specific Hazards Arising From Chemical: Arcs and sparks can ignite combustibles and flammable products. See American National Standard Z49.1; Safety in Welding and Cutting published by The American Welding Society.

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.

Conditions for Safe Storage: Store in dry place in closed packages. Keep separate from chemical substances like acids and strong bases, which could cause chemical reactions.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION:

Engineering Controls: Avoid exposure to welding fumes, radiation, spatter, electric shock, heated materials and dust. Ensure sufficient ventilation, local exhaust, or both, to keep welding fumes and gases from breathing zone and general area. Keep work place and protective clothing clean and dry. Train welders to avoid contact with live electrical parts and insulate conductive parts. Check condition of protective clothing and equipment on a regular basis.

Exposure limits: Use industrial hygiene equipment to ensure that exposure does not exceed applicable national exposure limits. The limits defined under section 3 can be used as guidance. Unless noted, all values are for 8 hour time weighted average. For information about welding fume analysis refer to section 10.

Biological limits: No available data

Personal protection:

Respiratory protection: Use an air purifying dust respirator when welding or brazing in a confined space, or when local exhaust or ventilation is not sufficient to keep exposure values within safe limits.

Hands protection: Wear appropriate gloves to prevent skin contact.

Eyes protection: Welder's helmet or face shield with colour absorbing lenses.

Skin protection: Wear safety boots, apron, arm and shoulder protection. Keep protective clothing clean and dry.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Solid.

Odour: Odourless

Melting Point/Melting Range: 2800 - 3200° F, 1538° C

Boiling Point/Boiling Range: 5500° F, 3038° C

Solubility: Insoluble in water.

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.

Conditions to Avoid: Not applicable.

Incompatible Materials: Reacts with acid.

Hazardous Decomposition Products: When this product is used in a welding process, hazardous decomposition product would include those from volatilization, reaction or oxidation of the material listed in section 3 and those from the base metal and coating. The amount of fumes generated from this product varies with welding parameters and dimensions. Fumes from this product contain compounds of the following chemical elements.

Fume analysis:	No available data.
Weight% less than	No available data.

Refer to applicable national exposure limits for fume compounds, including those exposure limits for fume compounds found in section 3. Manganese has a low exposure limit, in some countries that may be easily exceeded. Reasonably expected gaseous products would include carbon oxides, nitrogen oxides and ozone. Air contaminants around the welding area can be affected by the welding process and influence the composition and quality of fumes and gases produced.

11. TOXICOLOGICAL INFORMATION:

Signs and Symptoms of Overexposure: Inhalation of welding fumes and gases can be dangerous to your health. Classification of welding fumes is difficult because of varying base materials, coatings, air contaminants and processes. The Internal Agency for Research on Cancer has classified welding fumes as possible carcinogenic to humans (Group 2B).

Acute Effects: Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes.

Chronic Effects: Overexposure to welding fumes may affect pulmonary function. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait. Prolonged inhalation of titanium dioxide above safe exposure limits can cause cancer.

12. ECOLOGICAL INFORMATION:

Toxicity: No available data.

Persistence and Degradability: No available data.

Bio accumulative Potential: No available data.

Mobility in Soil: No available data.

Other Adverse Effects: No available data.

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: Not applicable

UN proper shipping name: Not applicable

Transport hazard class: Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for users: Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: No international regulations or restrictions are applicable.

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	1.0% de minimis Concentration

16. OTHER INFORMATION:

The information in this document is believed to be correct as of the date issued. However, no warranty is expressed to be implied regarding the accuracy or completeness of this information. This information and product are furnished on the condition that the person receiving them shall make his own determinations as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.

This Safety Data Sheet complies with the EC directives 91/155/EEC and 93/112/EEC, including modifications 2001/58/EC. Complies with OSHA Communication Standard 29 CFR 1910.1200 and Superfund Amendments and Reauthorization Act (SARA) of 1986 Public Law 99-499

S-Phrases:

S2 – Keep out of reach of children. **S22** – Do not breathe dust. **S24** – Avoid contact with skin. **S37** – Wear suitable gloves.

END OF SAFETY DATA SHEET.