SDS Number: Cutting Electrode
Revision Date: 7/10/2025

SAFETY DATA SHEET

This Safety Data Sheet (SDS) covers welding consumables and related products and complies with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Superfund Amendments and Reauthorization Act (SARA) of 1986. Refer to the OSHA standard for specific requirements. This SDS is available on our website at www.forneyind.com, through your sales representative, or by contacting customer service at 1-800-521-6038.

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION:

Manufacturer/Supplier:	Forney Industries, Inc.
Address:	2057 Vermont Drive Fort Collins, CO 80525
Website:	www.forneyind.com
Email:	CustomerService@forneyind.com
Phone Number:	+1 (800) 521-6038
USA Emergency Phone Number:	+1 (800) 535-5053
International Emergency Phone Number:	+1 (352) 323-3500
Trade Name:	Cutting Electrode
Forney ITEM#'s:	**31121**

SECTION 2 – HAZARDS IDENTIFICATION:

2.1. Classification of the substance or mixture

Skin Irrit. 2;H315 Causes skin irritation.
Eye Dam. 1;H318 Causes serious eye damage.

2.2. Label elements



Danger

H315 Causes skin irritation.
H318 Causes serious eye damage.

[Prevention]

P264 Wash thoroughly after handling.
P280 Wear protective gloves, eye protection, and face protection.

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[Response]

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER, doctor or physician.

P321 Specific treatment (see information on this label).

P332+313 If skin irritation occurs: Get medical attention.

P362 Take off contaminated clothing and wash before reuse.

[Storage]

No GHS storage statements

[Disposal]

No GHS disposal statements

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS:

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Iron **CAS Number: 0007439-89-6**	**50 - 75**	**Not Classified**	**---**
Cellulose **CAS Number: 0009004-34-6**	**5 - 10**	**Combustible Dust**	**---**
Manganese compounds (as Mn) **CAS Number: 0007439-96-5**	**1 - 5**	**Not Classified**	**---**
Sodium silicate **CAS Number: 0001344-09-8**	**1 - 5**	**Skin Irrit. 2;H315** **Eye Dam. 1;H318**	**---**
Iron oxide **CAS Number: 0001309-37-1**	**1 - 5**	**Not Classified**	**---**
Potassium silicate **CAS Number: 0001312-76-1**	**1 - 5**	**Skin Corr. 1B;H314** **Eye Dam. 1;H318** **STOT SE 3;H335**	**---**

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.
*PBT/vPvB - PBT-substance or vPvB-substance.
The full texts of the phrases are shown in Section 16.

SECTION 4 – FIRST AID MEASURES:

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

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Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	No specific symptom data available. Treat symptomatically. Check section 2.2 (GHS Label Elements) for further details.
Eyes	Causes serious eye damage.
Skin	Causes skin irritation.

SECTION 5 – FIRE-FIGHTING MEASURES:

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO_2, powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

ERG Guide No. ----

SECTION 6 – ACCIDENTAL RELEASE MEASURES:

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Sweep up or pick up.

SECTION 7 – HANDLING AND STORAGE:

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.
Check section 2.2 (GHS Label Elements) for further details. - [Prevention]

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: No available information
Check section 2.2 (GHS Label Elements) for further details. - [Storage]

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7.3. Specific end use(s)
No available information

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION:

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0001309-37-1	Iron oxide	OSHA	TWA 15 mg/m^3 (total) TWA 5 mg/m^3 (resp)
		ACGIH	TWA: 5 mg/m^3 (dust or fume) STEL 10 mg/m^3 (as fume)
		NIOSH	TWA 5 mg/m^3
0001312-76-1	Potassium silicate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0001344-09-8	Sodium silicate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0007439-89-6	Iron	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
0007439-96-5	Manganese compounds (as Mn)	OSHA	C 5 mg/m^3 *See specific listings for specific compounds.
		ACGIH	TWA: 0.2 mg/m^3
		NIOSH	TWA 1 mg/m^3 *See specific listings for specific compounds. STEL: 3 mg/m^3 *See specific listings for specific compounds.
0009004-34-6	Cellulose	OSHA	TWA 10 mg/m^3 (total) TWA 5 mg/m^3 (resp)
		ACGIH	TWA: 10 mg/m^3
		NIOSH	TWA 10 mg/m^3 (total) TWA 5 mg/m^3 (resp)

8.2. Exposure controls

Respiratory If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes Wear safety glasses with side shields to protect the eyes. An eye wash station is suggested as a good workplace practice.

Skin Avoid skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Check section 2.2 (GHS Label Elements) for further details.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES:

9.1. Information on basic physical and chemical properties

Appearance Black Solid

Odor Odorless

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Odor threshold	No available information
pH	No available information
Melting point / freezing point	1560 - 2000° F, 850 - 1100° C
Initial boiling point and boiling range	No available information
Flash Point	°F °C, Test method: (Open/Close cup)
Evaporation rate (Ether = 1)	No available information
Flammability (solid, gas)	No available information
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** No available information **Upper Explosive Limit:** No available information
Vapor pressure (Pa)	No available information
Vapor Density	No available information
Relative Density	No available information
Solubility in Water	No available information
Partition coefficient n-octanol/water (Log Kow)	No available information
Auto-ignition temperature	No available information
Decomposition temperature	No available information
Viscosity (cSt)	No available information
VOC Content	
Oxidising properties	No available information
Explosive properties	No available information
Particle Characteristics	---

9.2. Other information

No other relevant information.

SECTION 10 – STABILITY AND REACTIVITY:

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No available information

10.4. Conditions to avoid

Avoid high temperatures and contact with incompatible material

10.5. Incompatible materials

No available information

10.6. Hazardous decomposition products

No hazardous decomposition data available.

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SECTION 11 – TOXICOLOGICAL INFORMATION:

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Iron - (7439-89-6)	98,600.00, Rat - Category: NA	No data available.	No data available.	> 250.00, Rat - Category: NA	No data available.
Cellulose - (9004-34-6)	> 5,000.00, Rat - Category: NA	No data available.	No data available.	No data available.	No data available.
Manganese compounds (as Mn) - (7439-96-5)	> 2,000.00, Rat - Category: 4	No data available.	No data available.	> 5.14, Rat - Category: NA	No data available.
Sodium silicate - (1344-09-8)	5,150.00, Rat - Category: NA	> 5,000.00, Rat - Category: NA	No data available.	No data available.	No data available.
Iron oxide - (1309-37-1)	> 5,000.00, Rat - Category: NA	No data available.	No data available.	No data available.	No data available.
Potassium silicate - (1312-76-1)	No data available.	No data available.	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
0001309-37-1	Iron oxide	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A4
0001312-76-1	Potassium silicate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0001344-09-8	Sodium silicate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0007439-89-6	Iron	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
0007439-96-5	Manganese compounds (as Mn)	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	A4
0009004-34-6	Cellulose	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable

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Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

SECTION 12 – ECOLOGICAL INFORMATION:

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Iron - (7439-89-6)	No data available.	No data available.	No data available.
Cellulose - (9004-34-6)	100.00, Fish (Piscis)	No data available.	No data available.
Manganese compounds (as Mn) - (7439-96-5)	> 3.60, Oncorhynchus mykiss	> 1.60, Daphnia magna	4.50, Desmodesmus subspicatus
Sodium silicate - (1344-09-8)	301.00, Lepomis macrochirus	216.00, Daphnia magna	No data available.
Iron oxide - (1309-37-1)	No data available.	101.00, Daphnia magna	No data available.
Potassium silicate - (1312-76-1)	301.00, Lepomis macrochirus	500.00, Daphnia magna	No data available.

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

No available information

12.4. Mobility in soil

No available information

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No available information

SECTION 13 – DISPOSAL CONSIDERATIONS:

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

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SECTION 14 – TRANSPORT INFORMATION:

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	**DOT Hazard Class:** Not Applicable **Sub Class:** Not Applicable	**IMDG:** Not Applicable **Sub Class:** Not Applicable	**Air Class:** Not Applicable **Sub Class:** Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

14.5. Environmental hazards

Marine Pollutant: No;

14.6. Special precautions for user

No available information

SECTION 15 – REGULATORY INFORMATION:

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Manganese compounds (as Mn)

Proposition 65 - Carcinogens (>0.0%):

Silicon Dioxide

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

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Proposition 65 Label Warning:

WARNING: This product can expose you to chemicals including Silicon Dioxide which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16 – OTHER INFORMATION:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

End of Document