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SAFETY DATA SHEET



Issuing Date 17-Sep-2019	Revision date 17-Sep-2019	Revision Number 1	
1. Identification			
Product identifier			
Product Name	7018RS Eutectrode_US_EN		
Other means of identification	L		
Product Code(s)	WF00087		
Synonyms	7018RS Eutectrode		
Recommended use of the che	emical and restrictions on use		
Recommended use	ecommended use Covered Electrode for Shielded Metal Arc Welding (SMAW)		
Restrictions on use	trictions on use No information available		
Details of the supplier of the s	safety data sheet		
Supplier Address Eutectic Corporation, N94W14 Garwin Mace Dr, Menomonee 53051, USA		e Falls, WI 53051,	
Emergency telephone numbe	<u>)r</u>		
Company Phone Number	1-262-532-4677		
Emergency Telephone	Chemtrec 1-800-424-9300		

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC) Not applicable

Label elements

Danger

Hazard statements_____ May cause cancer May cause damage to organs through prolonged or repeated exposure

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Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Harmful to aquatic life with long lasting effects

When this product is used in a welding process, the hazards are mostly from electric shock, heat, radiation, fumes and gases. Electric shock can kill. Arc rays, spatter, and melting metals can severely injure eyes and burn skin. Welding arc and sparks can cause fire

Fumes and gases can be dangerous to your health. Certain medical studies have suggested that nervous system and/or lung damage can result from overexposure to welding fumes and gases

The welding fumes and gases produced from welding rod, coating flux, and base metal in a welding process may contain manganese and manganese compounds, nickel and nickel compounds, chromium (VI) and chromium compound, carbon dioxide, carbon monoxide, nitrogen dioxide, and ozone

Overexposure to manganese and its compounds may cause metal fume fever and affect the central nervous system. Prolonged inhalation of nickel and chromium (VI) compounds above safe exposure limits can cause cancer

Unknown acute toxicity

toxicity 93.56592 % of the mixture consists of ingredient(s) of unknown toxicity

10.125 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

93.56592 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

93.56592 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

93.56592 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

93.56592 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms

7018RS Eutectrode.

Chemical name	CAS No.	Weight-%	Trade secret
Limestone	1317-65-3	7-13	*
Calcium Fluoride	14542-23-5	7-13	*
Titanium dioxide	13463-67-7	1-5	*

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QUARTZ	14808-60-7	1-5	*
Manganese	7439-96-5	0.5-1.5	*
Silicon	7440-21-3	0.5-1.5	*
Bentonite	1302-78-9	0.5-1.5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures **Description of first aid measures General advice** IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance. Inhalation Remove to fresh air. Eve contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Skin contact Wash skin with soap and water. Ingestion Clean mouth with water and drink afterwards plenty of water. Most important symptoms and effects, both acute and delayed No information available. Symptoms Indication of any immediate medical attention and special treatment needed Note to physicians Treat symptomatically. 5. Fire-fighting measures Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient. Specific hazards arising from the No information available. chemical **Explosion data** Sensitivity to mechanical impact None. Sensitivity to static discharge None. Special protective equipment for Firefighters should wear self-contained breathing apparatus and full firefighting turnout fire-fighters gear. Use personal protection equipment. 6. Accidental release measures Personal precautions, protective equipment and emergency procedures **Personal precautions** Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Other information Refer to protective measures listed in Sections 7 and 8. Methods and material for containment and cleaning up

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Methods for containment	Prevent further leakage or spillage if safe to do so.				
Methods for cleaning up	Pick up and transfer to properly labeled containers.				
7. Handling and storag	e				
Precautions for safe handling					
Advice on safe handling	Handle in accordance with good industrial hygiene and s skin, eyes or clothing. Ensure adequate ventilation.	safety practice. Avoid	d contact with		
Conditions for safe storage, in	cluding any incompatibilities				
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ver	ntilated place.			

8. Exposure controls/personal protection

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Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Limestone 1317-65-3	No data available	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
		(vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	
Calcium Fluoride 14542-23-5	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F (vacated) TWA: 2.5 mg/m ³	IDLH: 250 mg/m ³ F TWA: 2.5 mg/m ³ F
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale
QUARTZ 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	 (vacated) TWA: 0.1 mg/m³ respirable dust (30)/(%SiO2 + 2) mg/m ³ TWA total dust (250)/(%SiO2 + 5) mppcf TWA respirable fraction (10)/(%SiO2 + 2) mg/m ³ TWA respirable fraction 	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
Manganese 7439-96-5	TWA: 0.02 mg/m ³ respirable particulate matter TWA: 0.1 mg/m ³ inhalable particulate matter	(vacated) TWA: 1 mg/m ³ fume (vacated) STEL: 3 mg/m ³ fume (vacated) Ceiling: 5 mg/m ³ Ceiling: 5 mg/m ³ fume	IDLH: 500 mg/m³ TWA: 1 mg/m³ fume STEL: 3 mg/m³
Silicon 7440-21-3	No data available	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Bentonite 1302-78-9	TWA: 1 mg/m ³ respirable particulate matter	-	-

Appropriate engineering controls

Engineering controls

Showers

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	Eyewash stations Ventilation systems.
Individual protection measures, su	ch as personal protective equipment
Eye/face protection	No special protective equipment required.
Hand protection	Wear suitable gloves.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties Physical state Solid

Physical state	Solid	
Appearance	Coated electrode	
Color	white	
Odor	Odorless	
Odor threshold	No information available	
Property	Values	Remarks • Method
рН	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity

No information available.

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Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document . ATEmix (oral) 15,649.40 mg/kg

Unknown acute toxicity 93.56592 % of the mixture consists of ingredient(s) of unknown toxicity 10.125 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

93.56592 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

93.56592 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

93.56592 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

93.56592 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium Fluoride 14542-23-5	= 4250 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
QUARTZ 14808-60-7	= 500 mg/kg (Rat)	-	-
Manganese 7439-96-5	= 9 g/kg (Rat)	-	-
Silicon 7440-21-3	= 3160 mg/kg (Rat)	-	-
Bentonite 1302-78-9	> 5000 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	Classification based on data available for ingredients.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Calcium Fluoride 14542-23-5	-	Group 3	-	-
Titanium dioxide 13463-67-7	-	Group 2B	-	Х
QUARTZ 14808-60-7	A2	Group 1	Known	Х

Legend

ACGIH (American Conference of Governmental Industrial Hygienists) A2 - Suspected Human Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans NTP (National Toxicology Program) Known - Known Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present			
Reproductive toxicity	No information available.		
STOT - single exposure	No information available.		
STOT - repeated exposure	May cause damage to organs.		
Target organ effects	kidney, Respiratory system, Eyes, Skin, Central nervous system, blood, Lungs.		
Aspiration hazard	No information available.		
Other adverse effects	No information available.		
Interactive effects	No information available.		

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Bentonite 1302-78-9		LC50: =19000mg/L (96h, Oncorhynchus mykiss) LC50: 8.0 - 19.0g/L (96h, Salmo gairdneri)		-

Persistence and degradability

No information available.

Bioaccumulation

There is no data for this product.

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Other adverse effects

No information available.

Waste treatment methods	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Manganese 7439-96-5	Ignitable powder

14. Transport information

DOT	Not regulated
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG_	Not regulated
RID	Not regulated
ADR	Not regulated
ADN	Not regulated

15. Regulatory information	1
International Inventories	
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.
Legend:	

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances **ENCS** - Japan Existing and New Chemical Substances This SDS is the latest version and is accurate on the day of printing,

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- IECSC China Inventory of Existing Chemical Substances
- KECL Korean Existing and Evaluated Chemical Substances
- **PICCS** Philippines Inventory of Chemicals and Chemical Substances
- AICS Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen
QUARTZ - 14808-60-7	Carcinogen
Silica, fused - 7631-86-9	Carcinogen
Nickel - 7440-02-0	Carcinogen

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Limestone 1317-65-3	Х	X	Х
Calcium Fluoride 14542-23-5	Х	-	-
Water 7732-18-5	-	-	Х
Titanium dioxide 13463-67-7	Х	X	Х
QUARTZ 14808-60-7	Х	X	Х
Manganese 7439-96-5	Х	X	Х
Silicon 7440-21-3	Х	X	Х
Potassium oxide 12136-45-7	Х	-	-

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U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other infor	mation				
<u>NFPA</u>	Health hazards 0	Flammability	0	Instability 0	Physical and chemical properties -
HMIS Chronic Hazard Star Le	Health hazards 1* egend *= Chronic	Flammability Health Hazard	0	Physical hazards	
Key or legend to ab	breviations and acronyms	used in the safe	ty data s	heet	
TWA T	EXPOSURE CONTROLS/PI WA (time-weighted average) /laximum limit value		ECTION TEL	STEL (Short [⊤] Skin designat	Term Exposure Limit) ion
U.S. Environmental F European Food Safe EPA (Environmental Acute Exposure Guid U.S. Environmental F U.S. Environmental F Food Research Journ Hazardous Substand International Uniform Japan GHS Classific Australia National Inst NIOSH (National Inst National Library of M National Library of M National Library of M National Toxicology I New Zealand's Chem Organization for Eco Organization for Eco	Protection Agency) deline Level(s) (AEGL(s)) Protection Agency Federal In Protection Agency Federal In Protection Agency High Produ- nal ce Database Chemical Information Datab ation dustrial Chemicals Notificatio titute for Occupational Safety edicine's ChemID Plus (NLM edicine's PubMed database Program (NTP) nical Classification and Inform nomic Co-operation and Dev nomic Co-operation and Dev nomic Co-operation and Dev nomic Co-operation and Dev nomic Co-operation and Dev	v Database secticide, Fungicio uction Volume Ch base (IUCLID) n and Assessmen r and Health) I CIP) (NLM PUBMED) nation Database (elopment Environ elopment High Pr elopment Screeni bstances)	emicals It Schem CCID) ment, He oduction	e (NICNAS) ealth, and Safety Public Volume Chemicals Pro	
Revision date	17-Sep-20				
Revision Note <u>Disclaimer</u> The information pro	No inform ovided in this Safety Data S	ation available. Sheet is correct to			nformation and belief at the

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet