Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Issue date: 7/22/2022 Revision date: 7/22/2022 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form Product name Product code	: Mixture : AFL Electrical Joint Compound No. 2 : 91
1.2. Recommended use and restrictio	ns on use
Use of the substance/mixture Restrictions on use	: Corrosion inhibitor : Industrial use
1.3. Supplier	
Only Representative CONTINENTAL PRODUCTS, INC. #6 Midwest Drive, P.O. Box 338 Pacific, MO 63069 - USA T 636-257-4449 kdb@contprod.com	
1.4. Emergency telephone number	
Emergency number	: CHEMTREC: 800-424-9300
2.1. Classification of the substance of GHS US classification Met. Corr. 1 Acute Tox. 3 (Oral) Acute Tox. 2 (Dermal) Acute Tox. 4 (Inhalation:vapour) Skin Corr. 1B Eye Dam. 1 Skin Sens. 1 STOT RE 1	May be corrosive to metals Toxic if swallowed Fatal in contact with skin Harmful if inhaled Causes severe skin burns and eye damage Causes serious eye damage May cause an allergic skin reaction Causes damage to organs through prolonged or repeated exposure
2.2. GHS Label elements, including pr	recautionary statements
GHS US labeling	
Hazard pictograms (GHS US) Signal word (GHS US) Hazard statements (GHS US)	: Danger : May be corrosive to metals Toxic if swallowed
	Foxic if swallowed Fatal in contact with skin Causes severe skin burns and eye damage May cause an allergic skin reaction Harmful if inhaled Causes damage to organs through prolonged or repeated exposure

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If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Absorb spillage to prevent material-damage. Store locked up. Store in corrosive resistant container with a resistant inner liner.	Precautionary statements (GHS US)	Wash contaminated clothing before reuse. Absorb spillage to prevent material-damage. Store locked up. Store in corrosive resistant container with a resistant inner liner. Dispose of contents/container to hazardous or special waste collection point, in accordance with
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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures		
Name	Product identifier	%
4-Oxazolemethanol, 4-ethyl-2-(8-heptadecenyl)-4,5-dihydro-	CAS-No.: 68140-98-7	15 - 40
Hydrofluoric acid	CAS-No.: 7664-39-3	3 - 7

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures		
4.1. Description of first aid measures		
First-aid measures after inhalation	: If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.	
First-aid measures after skin contact	: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse. Immediately call a poison center or doctor/physician.	
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.	
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.	

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4.2. Most important symptoms and effe	ects (acute and delayed)
Symptoms/effects	: Absorption of excessive F- can result in acute systemic fluorosis with hypocalcemia, interference with various metabolic functions and organ damage (heart, liver, kidneys).
Symptoms/effects after inhalation	: Harmful if inhaled. May cause burns to the respiratory tract.
Symptoms/effects after skin contact	: Fatal in contact with skin. Causes severe skin burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. Topical therapy with 2.5% calcium gluconate gel should be used to treat patients with symptoms of hydrofluoric acid skin burns. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguishi	ng media	
Suitable extinguishing media Unsuitable extinguishing media	Dry chemical. Foam. Carbon dioxide. Water spray.Do not use water jet.	
5.2. Specific hazards arising from the chemical		
Fire hazard	: Products of combustion may include, and are not limited to: oxides of carbon. Hydrogen fluoride.	
5.3. Special protective equipment and precautions for fire-fighters		
Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water spray.	

SECTION 6: Accidental release measur	es
6.1. Personal precautions, protective equip	ment and emergency procedures
General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
6.1.1. For non-emergency personnel	
No additional information available	
6.1.2. For emergency responders	
No additional information available	
6.2. Environmental precautions	
Prevent entry to sewers and public waters.	
6.3. Methods and material for containment a	and cleaning up
For containment	: Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.
Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal. Spilled material may present a slipping hazard. Provide ventilation. Absorb spillage to prevent material damage.

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6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage	9
7.1. Precautions for safe handling	
Additional hazards when processed Precautions for safe handling	 May be corrosive to metals. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not get in eyes, on skin, or on clothing. Do not breathe dust, fume, gas, mist, spray, vapors. Do not swallow. Handle and open container with care. When using do not eat or drink. Use only outdoors or in a well-ventilated area.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing must not be allowed out of the workplace. Always wash hands after handling the product.
7.2. Conditions for safe storage, inclu-	uding any incompatibilities
Storage conditions	: Keep out of the reach of children. Store locked up. Keep container tightly closed in a cool, well- ventilated place. Keep only in original container.
Packaging materials	: Do not store in corrodable metal.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

AFL Electrical Joint Compound No. 2	
No additional information available	
4-Oxazolemethanol, 4-ethyl-2-(8-hepta	udecenyl)-4,5-dihydro- (68140-98-7)
No additional information available	
Hydrofluoric acid (7664-39-3)	
USA - ACGIH - Occupational Exposure Lim	nits
ACGIH OEL TWA [ppm]	0.5 ppm
ACGIH OEL Ceiling [ppm]	2 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA - ACGIH - Biological Exposure Indices	5
BEI (BLV)	3 mg/g Kreatinin Parameter: Fluoride - Medium: urine - Sampling time: prior to shift (background, nonspecific) 10 mg/g Kreatinin Parameter: Fluoride - Medium: urine - Sampling time: end of shift (background, nonspecific)
USA - OSHA - Occupational Exposure Limit	its
OSHA PEL (TWA) [2]	3 ppm
8.2. Appropriate engineering controls	
Appropriate engineering controls Environmental exposure controls	Ensure good ventilation of the work station.Avoid release to the environment.

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8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves resistant to chemical penetration

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemica	I properties
9.1. Information on basic physical and	I chemical properties
9.1. Information on basic physical and Physical state Appearance Color Odor Odor threshold pH Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability Vapor pressure Relative vapor density at 20 °C Relative density Solubility Partition coefficient n-octanol/water Auto-ignition temperature Decomposition temperature	chemical properties : Liquid : Grease : Brown : Pungent : No data available : > 176.7 °C (> 350 °F) : No data available : > 176.7 °C (> 350 °F) : No data available : > 176.7 °C (> 350 °F) : No data available : > 0.01 mm Hg @ 20 °C (68 °F) : No data available : 0.95 : Insoluble. : No data available : No data available
Viscosity, kinematic Viscosity, dynamic Explosion limits Explosive properties Oxidizing properties	 No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use. May be corrosive to metals.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hydrofluoric acid may be released if put into large amounts of water.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizers. Metals.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Hydrogen fluoride. Thermal decomposition generates : Corrosive vapors.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity (dermal)	Toxic if swallowed. Fatal in contact with skin. Harmful if inhaled.
AFL Electrical Joint Compound No. 2	
ATE US (oral)	64 mg/kg body weight
ATE US (dermal)	64 mg/kg body weight
ATE US (vapors)	10.112 mg/l/4h
Hydrofluoric acid (7664-39-3)	
LC50 inhalation rat	0.79 mg/l (Exposure time: 1 h)
ATE US (oral)	5 mg/kg body weight
ATE US (dermal)	5 mg/kg body weight
ATE US (gases)	100 ppmV/4h
ATE US (vapors)	0.79 mg/l/4h
ATE US (dust, mist)	0.79 mg/l/4h
Serious eye damage/irritation:Respiratory or skin sensitization:Germ cell mutagenicity:	Causes severe skin burns. Causes serious eye damage. May cause an allergic skin reaction. Not classified
Reproductive toxicity :	Not classified Not classified Not classified
STOT-repeated exposure :	Causes damage to organs through prolonged or repeated exposure.
Hydrofluoric acid (7664-39-3)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Viscosity, kinematic :	Not classified No data available Absorption of excessive F- can result in acute systemic fluorosis with hypocalcemia, interference with various metabolic functions and organ damage (heart, liver, kidneys).

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Symptoms/effects after inhalation	: Harmful if inhaled. May cause burns to the respiratory tract.
Symptoms/effects after skin contact	: Fatal in contact with skin. Causes severe skin burns. Symptoms may include redness, pain, blisters. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

SECTION 12: Ecological information

12.1. Toxicity	
Ecology - general	: May cause long-term adverse effects in the aquatic environment.
Hydrofluoric acid (7664-39-3)	
LC50 - Fish [1]	51 mg/l Test organisms (species): other:summary of finidngs in various species
EC50 - Crustacea [1]	270 mg/l (Exposure time: 48 h - Species: Daphnia species)
LC50 - Fish [2]	165 mg/l Test organisms (species): other:summary of finidngs in various species
NOEC (chronic)	14.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	4 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '21 d'

12.2. Persistence and degradability

AFL Electrical Joint Compound No. 2	
Persistence and degradability	Not established.
12.3. Bioaccumulative potential	
AFL Electrical Joint Compound No. 2	
Bioaccumulative potential	Not established.
Hydrofluoric acid (7664-39-3)	
BCF - Fish [1] (no bioaccumulation)	
Partition coefficient n-octanol/water	-1.4
12.4. Mobility in soil	

No additional information available

12.5. Other adverse effects	
Other information	: No other effects known.

SECTION 13: Disposal considerations	
13.1. Disposal methods	
Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Hazardous waste due to toxicity.

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SECTION 14: Transport information	
In accordance with DOT	
14.1. UN number	
DOT NA No	: UN1790
14.2. UN proper shipping name	
Proper Shipping Name (DOT)	: Hydrofluoric acid (solution, with not more than 60 percent strength)
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT) Hazard labels (DOT)	: 8 (6.1) : 8, 6.1
14.4. Packing group	
Packing group (DOT)	: 11
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

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Issue date	: 07/22/2022	
Revision date	: 07/22/2022	
Other information	: None.	
Prepared by	: Nexreg Compliance Inc.	NEXREG
	www.Nexreg.com	

Full text of H-phrases	
Acute Tox. 2 (Dermal)	Acute toxicity (dermal) Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapor) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1

Safety Data Sheet (SDS), USA

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