

SAFETY DATA SHEET

NOKORODE[®] COLD FLUX[™]

Does not harden in cold temperatures

SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name Nokorode Cold Flux

Product Codes 14720, 14730

Chemical Family Organic/Inorganic

Use

Soldering flux

Manufacturer's Name RectorSeal LLC 2601 Spenwick Drive Houston, Texas 77055 USA

Date of validation April 20, 2022

Date of Preparation April 20, 2022 HMIS Codes

- Health 3
- Flammability 1
 - Reactivity 0
 - PPI B

Emergency Telephone No. Chemtrec 24 Hours (800) 424-9300 USA (703) 527-3887 International

Technical Service Telephone No. (800) 231-3345 or (713) 263-8001

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA Hazards Corrosive

GHS Classification

Physical Hazards None

Health Hazards Acute Toxicity:

> Oral: Not Classified Dermal: Not Classified Inhalation: Not Classified Skin corrosion/irritation Category 1B Serious eye damage/eye irritation Category 1 Respiratory or Skin Sensitization: Not Classified Germ Cell Mutagenicity: Not Classified Carcinogenicity: Not Classified

SECTION 2 - HAZARDS IDENTIFICATION

Reproductive Toxicology: Not Classified Target Organ Systemic Toxicity - Single Exposure: Not Classified Target Organ Systemic Toxicity - Repeated Exposure: Not Classified

Aspiration Toxicity: Not Classified

ENVIRONMENTAL HAZARDS

Hazardous to the Aquatic Environment: Not Classified Acute aquatic toxicity: Not Classified Chronic aquatic toxicity: Not Classified Bioaccumulation potential: Not Classified Rapid degradability: Not Classified

GHS Label elements, including precautionary statements



GHS05: Corrosive Signal Word: **Danger**

Hazard Statements:

H314 - Causes severe skin burns and eye damage.

Precautionary Statements: Prevention

P102 - Keep out of reach of children.

P260 - Do not breathe dusts or mists.

P264 - Wash hands thoroughly after handling.

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 +P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower. P363 - Wash contaminated clothing before reuse.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 - Immediately call a poison center/doctor.

P305 + P351 + P338 - 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 or doctor/physician.

Storage

P405 – Store locked up.

Disposal

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

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Summary Of Acute Hazards

Irritation to respiratory system from fumes evolved during soldering. Eye contact may cause intense irritation and injury.

Route Of Exposure, Signs And Symptoms

INHALATION: Irritation to respiratory system from fumes evolved during soldering.

EYE CONTACT: Contact may cause intense irritation and injury.

SKIN CONTACT: May cause skin irritation.

INGESTION: Nausea, vomiting, irritation to digestive system.

SUMMARY OF CHRONIC HAZARDS: Short term effects to liver and kidneys can occur. Chemical irritation from continued skin contact can occur. Continuous industrial use in small unventilated areas may result in sufficient inhalation of solder and flux fumes to cause lung damage and irritation of respiratory tract.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver, or kidneys may have increased susceptibility to excessive exposure.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Zinc Chloride	Ingredient	Petrolatum
Percentage By Weight	10-25	Percentage By Weight	70-90
CAS#	7646-85-7	CAS Number	8009-03-8
EC#	231-592-0	EC#	232-373-2
Ingredient	Ammonium Chloride	Ingredient	Petroleum Distillates
Ingredient Percentage By Weight		Ingredient Percentage By Weight	
5	10-25	5	< 10

SECTION 4 - FIRST AID MEASURES

IF INHALED:	If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.
IF ON SKIN:	Immediately wash with soap and water. Remove and wash any contaminated clothing.
IF IN EYES:	Immediately flush with large amounts of water for at least 15 minutes. Get medical attention if irritation persists.
IF SWALLOWED:	If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Section 5 - Fire Fighting Measures

Extinguishing media

Foam, dry chemical, carbon dioxide or water fog.

Special fire fighting procedures

Wear self-contained full face piece breathing apparatus and other protective clothing. Hazardous decomposition products possible (see Section 10). May release ZnO and HCl fumes.

Unusual fire and explosion hazards

Heat may build up pressure and rupture closed containers.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Wipe up spills to prevent footing hazard. Avoid flushing into sewers, drains, waterways and soil. Wear protective clothing during clean up.

SECTION 7 - HANDLING AND STORAGE

Precautions to be taken in handling and storing:

Keep container closed and upright when not in use. Store flux at ambient conditions. Wash thoroughly after handling to remove all residue.

Other precautions:

Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues; treat as if full and observe all products precautions. Do not reuse empty containers.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Zinc Chloride ACGIH TLV 1 mg/m31 mg/m3OSHA PEL Ammonium Chloride ACGIH TLV 10 mg/m3OSHA PEL 10 mg/m3 Petrolatum ACGIH TLV N/D OSHA PEL N/D Petroleum Distillates ACGIH TLV N/D OSHA PEL N/D

Respiratory Protection (Specify Type): In confined poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air purifying or supplied air respirators during soldering operations until fumes have dissipated. Ventilation: Local Exhaust: Acceptable Special: N/A Mechanical (General): Acceptable. Other: N/A Protective Gloves: Wear rubber gloves. Eye Protection: Safety glasses (ANSI Z-87.1 or equivalent) Other Protective Clothing Or Equipment: Coveralls recommended. Work/Hygienic Practices: Where use can result in skin contact, wash exposed areas thoroughly before eating,

drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	N/A
SPECIFIC GRAVITY (H20 = 1)	1.06
VAPOR PRESSURE (MMHG)	< 0.01 @ 68°F (20°C)
MELTING POINT	120° – 150°F (52° – 66°C)
VAPOR DENSITY (AIR = 1)	N/A
EVAPORATION RATE (ETHYL ACETATE = 1)	N/A
APPEARANCE/ODOR	Tan/Petroleum odor
SOLUBILITY IN WATER	Insoluble
VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT (THEORETICAL PERCENTAGE BY WEIGHT)	0% or (0 g/L)
FLASH POINT	> 400°F (204°C) SETA CC
LOWER EXPLOSION LIMIT	N/D
UPPER EXPLOSION LIMIT	N/D

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable Conditions to avoid: None.

Incompatibility (materials to avoid): None known.

Hazardous decomposition products: Toxic fumes of zinc, chlorine, and HCL may be evolved during soldering.

Hazardous polymerization:

Will not occur.

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SECTION 11 - TOXICOLOGY INFORMATION

Chronical Health Hazards:

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

Toxicology Data:

Ingredient name

Zinc Chloride

Oral-Rat LD50: Inhalation-Rat LCLo:	350 mg/kg 1960 mg/m3/10M
Ammonium Chloride Oral-Rat LD50: Inhalation-Rat LC50:	1650 mg/kg N/D
Petrolatum Oral-Rat LD50: Inhalation-Rat LC50:	N/D N/D
Petroleum Distillates Oral-Rat LD50: Inhalation-Rat LC50:	N/D N/D

SECTION 12 - ECOLOGICAL INFORMATION

Ecological Data:

Ingredient Name:	Zinc Chloride
Food Chain Concentration Potential	None
Waterfowl Toxicity	N/A
BOD	None
Aquatic Toxicity	7.2 ppm/96 hr/medium bluegill/TLm
Ingredient Name:	Ammonium Chloride
Food Chain Concentration	None
Waterfowl Toxicity	N/A
BOD	N/A
Aquatic Toxicity	6 ppm/96 hr/sunfish/TLm
Ingredient Name:	Petrolatum
Ingredient Name: Food Chain Concentration Potential	Petrolatum N/D
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Food Chain Concentration Potential	N/D
Food Chain Concentration Potential Waterfowl Toxicity	N/D N/D
Food Chain Concentration Potential Waterfowl Toxicity BOD Aquatic Toxicity	N/D N/D N/D
Food Chain Concentration Potential Waterfowl Toxicity BOD Aquatic Toxicity	N/D N/D N/D N/D
Food Chain Concentration Potential Waterfowl Toxicity BOD Aquatic Toxicity Ingredient Name:	N/D N/D N/D Petroleum Distillates
Food Chain Concentration Potential Waterfowl Toxicity BOD Aquatic Toxicity Ingredient Name: Food Chain Concentration Potential	N/D N/D N/D Petroleum Distillates N/D
Food Chain Concentration Potential Waterfowl Toxicity BOD Aquatic Toxicity Ingredient Name: Food Chain Concentration Potential Waterfowl Toxicity	N/D N/D N/D Petroleum Distillates N/D N/D

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SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Classification: Non-regulated solid waste

Disposal Method: Approved landfill

Waste from this product is not considered hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

SECTION 14 - TRANSPORTATION INFORMATION

DOT: Non-Regulated

OCEAN (IMDG): Non-Regulated

AIR (IATA): Non-Regulated

WHMIS (CANADA): Non-Regulated

SECTION 15 - REGULATORY INFORMATION

Regulatory Data:

Ingredient Name:	Zinc Chloride	Ingredient Name:	Petrolatum
SARA 313	Yes	SARA 313	No
TSCA Inventory	Yes	TSCA Inventory	Yes
CERCLA RQ	1000 lb.	CERCLA RQ	N/A
RCRA Code	N/A	RCRA Code	N/A
Ingredient Name:	Ammonium Chloride	Ingredient Name:	Petroleum Distillates
Ingredient Name: SARA 313		Ingredient Name: SARA 313	
0	No	8	No
SARA 313	No Yes	SARA 313	No Yes
SARA 313 TSCA Inventory	No Yes N/A	SARA 313 TSCA Inventory	No Yes N/A

Section 16 - Other Information

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001