



A CSW Industrials Company

SAFETY DATA SHEET

NOKORODE® C-FLUX®

High Quality Soft Soldering Flux

SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name

Nokorode C-Flux

Product Codes

74025, 74026

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.

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
Percentage By Weight < 20
CAS# 7646-85-7
EC# 231-592-0

Ingredient Tin
Percentage By Weight —
CAS Number 7440-31-5
EC# 231-141-8

Ingredient Ammonium Chloride
Percentage By Weight < 1
CAS Number 12125-02-9
EC# 235-186-4

Ingredient Antimony
Percentage By Weight < 1
CAS Number 7440-31-5
EC# 231-146-5

Ingredient Zinc Oxide
Percentage By Weight < 10
CAS Number 1314-13-2
EC# 215-222-5

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.

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/m³
OSHA PEL 1 mg/m³

Ammonium Chloride

ACGIH TLV 10 mg/m³
OSHA PEL 10 mg/m³

Zinc Oxide

ACGIH TLV 5 mg/m³
OSHA PEL 5 mg/m³

Tin

ACGIH TLV 5 mg/m³
OSHA PEL 5 mg/m³

Antimony

ACGIH TLV 0.5 mg/m³
OSHA PEL 0.5 mg/m³

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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT N/D

SPECIFIC GRAVITY (H₂O = 1) 1.59

VAPOR PRESSURE (MMHG) N/D

MELTING POINT N/D

VAPOR DENSITY (AIR = 1) N/A

EVAPORATION RATE (ETHYL ACETATE = 1) N/A

APPEARANCE/ODOR Gray Paste/No odor

SOLUBILITY IN WATER Insoluble

**VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT
(THEORETICAL PERCENTAGE BY WEIGHT)** 0% or (0 g/L)

FLASH POINT > 230°F (110°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.

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: 350 mg/kg

Inhalation-Rat LCLo: 1960 mg/m3/10M

Ammonium Chloride

Oral-Rat LD50: 1650 mg/kg

Inhalation-Rat LC50: N/D

Zinc Oxide

Oral-Rat TDLo: 6846 mg/kg

Inhalation-Mouse LC50: 2500 mg/m3

Tin

Oral-Rat LD50: N/D

Inhalation-Rat LC50: N/D

Antimony

Oral-Rat LD50: 7 g/kg

Inhalation-Rat TCLo: 50 mg/m3/7H/52W-I

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: **Zinc Oxide**

Food Chain Concentration Potential N/D
Waterfowl Toxicity N/D
BOD N/D
Aquatic Toxicity N/D

Ingredient Name: **Tin**

Food Chain Concentration Potential N/D
Waterfowl Toxicity N/D
BOD N/D
Aquatic Toxicity N/D

Ingredient Name: **Antimony**

Food Chain Concentration Potential N/D
Waterfowl Toxicity N/D
BOD N/D
Aquatic Toxicity N/D

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**

SARA 313 Yes

TSCA Inventory Yes

CERCLA RQ 1000 lb.

RCRA Code N/A

Ingredient Name: **Ammonium Chloride**

SARA 313 No

TSCA Inventory Yes

CERCLA RQ N/A

RCRA Code N/A

Ingredient Name: **Zinc Oxide**

SARA 313 Yes

TSCA Inventory Yes

CERCLA RQ N/A

RCRA Code N/A

Ingredient Name: **Tin**

SARA 313 No

TSCA Inventory Yes

CERCLA RQ N/A

RCRA Code N/A

Ingredient Name: **Antimony**

SARA 313 Yes

TSCA Inventory Yes

CERCLA RQ 5000 lb.

RCRA Code 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