

MATERIAL SAFETY DATA SHEET

MSDS 0656

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Section 1 -- PRODUCT AND COMPANY IDENTIFICATION  
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	HMIS CODES	
PRODUCT NAME	Health	1
Nokorode Regular Paste Flux	Flammability	1
	Reactivity	0
PRODUCT CODES	PPI	B
14000, 14003, 14010, 14020, 14030		
CHEMICAL FAMILY		
Organic/Inorganic		
USE		
Soldering Flux		
MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.	
The RectorSeal Corporation	Chemtrec 24 Hours	
2601 Spenwick Drive	(800)424-9300 USA	
Houston, Texas 77055 USA	001-527-3887 International	
DATE OF VALIDATION	TECHNICAL SERVICE TELEPHONE NO.	
May 2, 2012	(800)231-3345 or (713)263-8001	
DATE OF PREPARATION		
May 2, 2012		

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Section 2 -- HAZARDS IDENTIFICATION  
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EMERGENCY OVERVIEW

OSHA Hazards

Irritant

GHS CLASSIFICATION

PHYSICAL HAZARDS: None

HEALTH HAZARDS

Acute Toxicity:

Oral: Not Classified

Dermal: Not Classified

Inhalation: Not Classified

Skin Corrosion/Irritation: Not Classified

Serious Eye Damage/Eye Irritation: Not Classified

Respiratory or Skin Sensitization: Not Classified

Germ Cell Mutagenicity: Not Classified

Carcinogenicity: Not Classified

Reproductive Toxicology: Not Classified

Target Organ Systemic Toxicity - Single Exposure: Not Classified

Target Organ Systemic Toxicity - Repeated Exposure: Not Classified

Aspiration Toxicity: Not Classified

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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

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GHS Label elements, including precautionary statements

Pictogram: Irritant

Signal Word: Warning

Hazard Statements:

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Precautionary Statements:

P102 - Keep out of reach of children.

P262 - Do not get in eyes, on skin, or on clothing.  
P264 - Wash hands thoroughly after handling.  
P281 Use personal protective equipment as required.

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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.

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Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS

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INGREDIENT: Zinc Chloride  
PERCENTAGE BY WEIGHT: 10-25  
CAS#: 7646-85-7  
EC#: 231-592-0

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INGREDIENT: Ammonium Chloride  
PERCENTAGE BY WEIGHT: 10-25  
CAS#: 12125-02-9  
EC#: 235-186-4

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INGREDIENT: Petrolatum  
PERCENTAGE BY WEIGHT: 70-90  
CAS#: 8009-03-8  
EC#: 232-373-2

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Section 4 -- FIRST AID MEASURES

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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: Flush eyes with large amounts of water for 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.

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Section 5 -- FIRE FIGHTING MEASURES

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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  
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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.

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Section 7 -- HANDLING AND STORAGE  
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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.

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Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION  
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INGREDIENT	UNITS
Zinc Chloride	
ACGIH TLV	1 mg/m3
OSHA PEL	1 mg/m3
Ammonium Chloride	
ACGIH TLV	10 mg/m3
OSHA PEL	10 mg/m3
Petrolatum	
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 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  
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BOILING POINT:	N/A
SPECIFIC GRAVITY (H2O = 1):	1.06
VAPOR PRESSURE (mm Hg):	< 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

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Section 10 -- STABILITY AND REACTIVITY  
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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  
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CHRONIC HEALTH HAZARDS

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

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TOXICOLOGY DATA

Ingredient Name

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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

Petrolatum

Oral-Rat LD50:N/D  
Inhalation-Rat LC50:N/D

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Section 12 -- Ecological Information  
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ECOLOGICAL DATA

Ingredient Name

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Zinc Chloride

Food Chain Concentration Potential      None  
WATERFOWL TOXICITY                      N/A  
BOD    None  
AQUATIC TOXICITY: 7.2 ppm/96 hr/medium bluegill/TLm

Ammonium Chloride

Food Chain Concentration Potential      None  
WATERFOWL TOXICITY                      N/A  
BOD    N/A  
AQUATIC TOXICITY: 6 ppm/96 hr/sunfish TLm

Petrolatum

Food Chain Concentration Potential      N/D  
WATERFOWL TOXICITY                      N/D  
BOD    N/D  
AQUATIC TOXICITY:                          N/D

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Section 13 -- DISPOSAL CONSIDERATIONS  
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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.

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Section 14 -- TRANSPORTATION INFORMATION  
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DOT:                      Non-Regulated

OCEAN (IMDG):          Non-Regulated

AIR (IATA):              Non-Regulated

WHMIS (CANADA):        Non-Regulated

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Section 15 -- REGULATORY INFORMATION  
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REGULATORY DATA

Ingredient Name

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Zinc Chloride

SARA 313                      Yes

	TSCA Inventory	Yes
	CERCLA RQ	1000 lb.
	RCRA Code	N/A
Ammonium Chloride		
	SARA 313	No
	TSCA Inventory	Yes
	CERCLA RQ	N/A
	RCRA Code	N/A
Petrolatum		
	SARA 313	No
	TSCA Inventory	Yes
	CERCLA RQ	N/A
	RCRA Code	N/A

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 Section 16 -- OTHER INFORMATION  
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