

# 7616

MATERIAL SAFETY DATA SHEET

MSDS REC'D by Trane July 16, 2009

MSDS 0426

CHM00796

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

		HMIS CODES	
PRODUCT NAME		Health	1
Nokorode Aqua Flux		Flammability	1
		Reactivity	0
PRODUCT CODES		PPI	B
74044, 74046, 74047			
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	
Houston, Texas 77055 USA			
DATE OF PREPARATION		TECHNICAL SERVICE TELEPHONE NO.	
August 7, 2002		(800) 231-3345	

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS
10-25	7646-85-7	Zinc Chloride	
		ACGIH TLV	1 mg/m3
		OSHA PEL	1 mg/m3
10-25	12125-02-9	Ammonium Chloride	
		ACGIH TLV	10 mg/m3
		OSHA PEL	10 mg/m3
400 F (204 C) SETA CC		N/D	N/D

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.

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 Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION
 

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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 (H<sub>2</sub>O = 1): 0.98  
 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

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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.

## TOXICOLOGY DATA

 Ingredient Name
 

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## Zinc Chloride

Oral-Rat LD50:350 mg/kg  
 Inhalation-Rat LCLo:1960 mg/m<sup>3</sup>/10M

## Ammonium Chloride

Oral-Rat LD50:1650 mg/kg  
 Inhalation-Rat LC50:N/D

## Diethanolamine

Oral-Rat LD50:710 mg/kg  
 Inhalation-Rat LC50:N/D

## Petrolatum

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

Ethanolamine Hydrochloride  
 Oral-Rat LD50:N/D  
 Inhalation-Rat LC50:N/D  
 Poly(ethylene oxide)  
 Oral-Rat LD50:32 g/kg  
 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
Diethanolamine	Food Chain Concentration Potential	N/D
	WATERFOWL TOXICITY	N/D
	BOD	10%
	AQUATIC TOXICITY:	2100 ppm/24 hr/sunfish, bluegill/TLm
Petrolatum	Food Chain Concentration Potential	None
	WATERFOWL TOXICITY	N/D
	BOD	N/D
	AQUATIC TOXICITY:	N/D
Ethanolamine Hydrochloride	Food Chain Concentration Potential	None
	WATERFOWL TOXICITY	N/D
	BOD	N/D
	AQUATIC TOXICITY:	N/D
Poly(ethylene oxide)	Food Chain Concentration Potential	None
	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 lbs.
RCRA Code	N/A

## Ammonium Chloride

SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

## Diethanolamine

SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	100 lbs.
RCRA Code	N/A

## Petrolatum

SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

## Ethanolamine Hydrochloride

SARA 313	Yes
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

## Poly(ethylene oxide)

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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