

Prepared
7-1-87**MATERIAL SAFETY DATA SHEET**
"ESSENTIALLY SIMILAR" TO OSHA FORM 20

Product Name

RXN-57

Code No.

None

ADDRESS:
REACTION ENGINEERING
PO Box 1452
Dodge City, KS 67801

Emergency Phone Number(s)

Business: (316) 225-2154

Other: (800) 424-9300 Chemtrec

PRC IDENTIFIERS

Chemical Name and Molecular Formula

PROPRIETARY FORMULATION

CAS No.(s)

Not applicable for blends

HAZARDOUS INGREDIENTS

Synonyms

None

Chemical Family

Water Treating

MATERIALS OR COMPONENTS

% w/w

HAZARD DATA (TLV, LD50, LC50, etc.)

1-HYDROXYETHYLIDENE-1,
1-DIPHOSPHONIC ACID

< 15

None established

Corrosive Hazard

SODIUM HYDROXIDE

< 10

2 mg/M³ - OSHA PEL2 mg/M³ - ACGIH TLV

Corrosive Hazard

AUG 23 1990

THE STATE OF KANSAS
ENGINEERING DEPARTMENT

SHIPPING INFORMATION

WATER TREATMENT COMPOUND, LIQUID

CORROSIVE MATERIAL

NA-1760

Corrosive Label Required

ALITIES

Boiling Point/Range °C °F	Melting Point °C N/E	Freezing Point °C N/E	Molecular Weight (Calculated) N/E
212 410	1074 @ 20 / 20	°C @	Vapor Pressure (mm Hg) °C N/E

Specific Gravity (H₂O=1) Vapor Density (Air=1)

1.074 @ 20 / 20 °C @ °C N/E °F N/E

P

Solubility in H ₂ O	% Volatiles by Volume	Evaporation Rate	Ether = 1	Water = 1	Butylacetate = 1
Complete	> 50	< 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

FIRE AND EXPLOSION DATA

Flash Point °C °F	Test Method TOC	Flammable Limits Lower N/A	% Upper	N/A	%	Autoignition Temperature/Fire Point °C N/A °F
None	TOC	CO ₂	Dry chemical	Alcohol foam	Foam	Earth or sand

EXTINGUISHING MEDIA
 Water-spray Water-fog Water stream CO₂ Dry chemical Alcohol foam Foam Earth or sandSPECIAL FIRE FIGHTING PROCEDURES
 Do not enter building Allow fire to burn Water may cause frothing Do not use water Use self-contained breathing apparatus None knownUNUSUAL FIRE AND EXPLOSION HAZARDS
 Dust explosion hazard Sensitive to shock Contamination Temperature Other (specify): None known

REACTIVITY DATA

STABILITY	CONDITIONS CONTRIBUTING TO INSTABILITY
<input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	<input type="checkbox"/> Thermal decomposition <input type="checkbox"/> Photo degradation <input type="checkbox"/> Polymerization <input checked="" type="checkbox"/> Contamination

INCOMPATIBILITY - Avoid contact with
 Strong acids Strong alkalis Strong oxidizers Other (specify):

HAZARDOUS DECOMPOSITION PRODUCTS - THERMAL AND OTHER (list)

May evolve CO₂, CO₃ and Phosphines; also Oxides of Nitrogen

CONDITIONS TO AVOID

 Heat Open flames Sparks Ignition sources Other (specify): None knownSTEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
 Flush with water Absorb with sand or inert material Neutralize Sweep or scoop up and remove Keep upwind. Evacuate enclosed spaces. Prevent spread of spill Dispose of immediately Other (specify):

ASTE DISPOSAL METHOD - Consult federal, state, or local authorities for proper disposal procedures.

Dispose in accordance with Federal, State and Local regulations.

CONTINUED ON
REVERSE SIDE

TOXICITY	Oral (acute) Irritant, possibly corrosive.						
	Dermal (acute) Irritant.						
	Eye Possibly corrosive.	Inhalation (acute)					
	Chronic, Subchronic, etc.						
NOTE: THIS PRODUCT IS <u>NOT</u> CONSIDERED TO BE A CARCINOGEN BY NTP, IARC, OR OSHA.							
HAZARD INFORMATION Effects of Exposure	PERMISSIBLE EXPOSURE LIMIT (Specify if TLV/TWA or Ceiling [c])				Other: None		
	ACGIH 10	N/A	OSHA 19	N/A			
	IRRITATION	<input checked="" type="checkbox"/> Skin <input checked="" type="checkbox"/> Eye	<input checked="" type="checkbox"/> Severe <input checked="" type="checkbox"/> Severe	<input type="checkbox"/> Moderate <input type="checkbox"/> Moderate		<input type="checkbox"/> Mild (transient)	
	CORROSIVITY	<input type="checkbox"/> Skin <input checked="" type="checkbox"/> Eye	<input type="checkbox"/> 4 hrs. (DOT) <input type="checkbox"/> May cause blindness	<input type="checkbox"/> 24 hrs. (CPSC)			
	SENSITIZATION	<input type="checkbox"/> Skin <input type="checkbox"/> Respiratory	<input type="checkbox"/> Allergen	INHALATION EFFECTS		<input type="checkbox"/> Narcotic effect <input type="checkbox"/> Cyanosis <input type="checkbox"/> Asphyxiant	
	LUNG EFFECTS (Specify):	N/E					
	OTHER (Specify):	<input type="checkbox"/> Repeated contact - <input type="checkbox"/> skin defatting	<input checked="" type="checkbox"/> Other (Specify):	N/E			
	INGESTION	<input type="checkbox"/> Induce vomiting	<input checked="" type="checkbox"/> Do NOT induce vomiting	<input checked="" type="checkbox"/> Give plenty of water		<input checked="" type="checkbox"/> Get medical attention	<input type="checkbox"/> Other (specify):
	DERMAL	<input checked="" type="checkbox"/> Flush with soap and water	<input checked="" type="checkbox"/> Get medical attention	<input checked="" type="checkbox"/> Contaminated clothing - remove & launder		<input checked="" type="checkbox"/> Contaminated shoes - destroy	<input type="checkbox"/> Other (specify):
	EYE CONTACT	<input checked="" type="checkbox"/> Flush with plenty of water for at least 15 minutes		<input checked="" type="checkbox"/> Get medical attention		<input type="checkbox"/> Other (specify):	
INHALATION	<input type="checkbox"/> Remove to fresh air	<input checked="" type="checkbox"/> If not breathing, give artificial respiration	<input checked="" type="checkbox"/> Give oxygen	<input checked="" type="checkbox"/> Get medical attention	<input type="checkbox"/> Other (specify):		
HEALTH INFORMATION Emergency First Aid	VENTILATION REQUIREMENTS - Always maintain exposure below permissible exposure limits						
	<input type="checkbox"/> Consult an industrial hygienist or environmental health specialist	<input type="checkbox"/> Local exhaust	<input checked="" type="checkbox"/> Use with adequate ventilation	<input checked="" type="checkbox"/> Check for air contaminant and oxygen deficiency			
	<input type="checkbox"/> Other (specify):						
PROTECTION INFORMATION	EYE	<input checked="" type="checkbox"/> Face shield and goggles <input type="checkbox"/> Safety glasses	HAND (GLOVE TYPE)	<input checked="" type="checkbox"/> Butyl rubber <input type="checkbox"/> Natural rubber	Polyvinyl alcohol <input type="checkbox"/> Polyethylene	<input type="checkbox"/> Other (specify):	
		<input type="checkbox"/> Goggles	<input type="checkbox"/> Polyvinyl chloride	<input checked="" type="checkbox"/> Neoprene			
SPECIAL INSTRUCTIONS	RESPIRATOR TYPE - Use only NIOSH approved equipment					Always comply with	
	<input type="checkbox"/> Self-contained	<input type="checkbox"/> Supplied air	<input checked="" type="checkbox"/> Can or cartridge gas or vapor	<input checked="" type="checkbox"/> Filter - dust, fume, mist	<input checked="" type="checkbox"/> Other (specify):	29 CFR 1910.134	
OTHER PROTECTIVE EQUIPMENT							
<input checked="" type="checkbox"/> Rubber boots	<input checked="" type="checkbox"/> Apron	<input checked="" type="checkbox"/> Other (specify):	Safety shower and eye wash				
SPECIAL PRECAUTIONS	PRECAUTIONARY LABELING						
	<input type="checkbox"/> Wash thoroughly after handling	<input checked="" type="checkbox"/> Do not get in eyes, on skin or clothing	<input checked="" type="checkbox"/> Do not breathe dust, vapor, mist, gas	<input checked="" type="checkbox"/> Keep container closed	<input checked="" type="checkbox"/> Keep away from heat, sparks, and open flames	<input checked="" type="checkbox"/> Store in tightly closed containers	
	<input type="checkbox"/> Do not store near combustibles	<input checked="" type="checkbox"/> Keep from contact with clothing and other combustible materials	<input checked="" type="checkbox"/> Empty container may contain hazardous residues	<input type="checkbox"/> Use explosion proof equipment	<input type="checkbox"/> Other (specify):		
Other handling and storage conditions							
DO NOT SMOKE WHEN HANDLING CHEMICALS.							

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