# **MATERIAL SAFETY DATA SHEET**

		RMATION			
Product Name: Totaline <sup>®</sup> Condenser Clea Product Number(s): P902-0101, P902-01		2-0155	Da	ate Prepared	May 22, 2006
Product Number(s). P902-0101, P902-0105, P902-0135, P902-0155 Product Use: Condenser coil cleaner			Re	eplaces	Aug. 12, 2004
Company Name: North American Rese	arch Corporation				
P.O. Box 1318 Lewisville, TX 75067					
Felephone Numbers: (972) 492-1800, (80		72) 394-6755			
Emergencies: Infotrac (800) 535-5053 (24	4 hours, everyday)	2,0010100			
SECTION 2 COMPOSITION / INFORM	ATION ON INGRED	IENTS			
OSHA Hazardous Components (29 CFR	1910.1200):				
	CAS				%
	Registry No.	<u>OSHA PEL</u>	ACGIH TLV	Other Limits	· · · · · · · · · · · · · · · · · · ·
Potassium Hydroxide	1310-58-3	2 mg/m <sup>3</sup> Ceiling	2 mg/m <sup>3</sup> Ceiling	None known	< 26
SECTION 3 HAZARDS IDENTIFICATI	ON				
EMERGENCY OVERVIEW					
POISON! DANGER! CORROSIV	'E. CAUSES SEVER	E BURNS TO SKIN	EYES. AND OTHE	R BODY TISSI	JE. HARMFUL
OR FATAL IF SWALLOWED.					
POTENTIAL HEALTH EFFECTS					
EYE CONTACT: Corrosive. May ca	use permanent dama	age including blindne	ess.		
SKIN CONTACT: Corrosive. May ca	use permanent dama	age.			
INHALATION: May cause irritation avoided by self-lin	n and corrosive effect niting coughing and s		at, and respiratory tra	act. Severe inju	ry is usually
INGESTION: Corrosive. May ca	use burns to mouth,	throat, and stomach			
CHRONIC EXPOSURE: No known chroni	c effects.				
MEDICAL CONDITIONS AGGRAVATED	BY EXPOSURE: Nor	ne known other thar	existing skin disord	ers.	
CARCINOGENICITY: NTP? No IA	RC Monographs? No	o OSHA Regu	lated? No		
SECTION 4 FIRST-AID MEASURES					
EYE CONTACT: Immediately flush immediately.	eyes with running wa	ater for at least 15 m	inutes, keeping eyel	ids open. Get n	nedical attention
SKIN CONTACT: Flush immediately	with plenty of water	for at least 15 minut	es. Get medical atte	ntion immediate	ely.
INHALATION: If breathing is diffi	cult: Remove to fresh	air. Get medical att	ention immediately.		
INGESTION: Do not induce von			of water. Never give	anything by mo	outh to an
	on. Get medical atten	tion immediately.			
SECTION 5 FIRE-FIGHTING MEASUR					
	HOD: Not applicable	lat appliachia		· Not oppliage	•
FLAMMABLE LIMITS: LEL: Not appli		• •	TOIGNITION TEMP	• •	
GENERAL HAZARD: Not considered to b hydrogen gas.	e a me nazaru. Will f	east with some meta	ais, eg. Aiuminum, ti	η, Ζίης το ιστή ι	annade
	ns suitable for exting	uishing surrounding	fire. Water spray ma	ay be used to k	eep fire-exposed
FIRE EXTINGUISHING MEDIA: Use mea containers cool.	-				
	erial. See sections 8	and 10.			

ENVIRONMENTAL PRECAUTIONS AND CLEAN-UP:

Small spills: Mop up or soak up with rags and flush with water.

In the event of major spillage: Use appropriate containment consistent with good industrial or environmental practice. Recover as much as possible. Pump, sweep or scrape up the remaining material and place in suitable clean containers for disposal by proper methods. Use a water rinse for final clean-up.

SPECIFIC GRAVITY: 1.26

pH: 14

VAPOR DENSITY: Not determined

FREEZING / MELTING POINT: Not determined

## SECTION 7 STORAGE AND HANDLING

HANDLING: Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid breathing vapors or spray mists. Wash thoroughly after handling. Remove and wash contaminated clothing and footwear before reuse. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR INDUSTRIAL USE ONLY.

STORAGE: Keep tightly closed in original container. Store in a cool, dry, ventilated area. Protect against physical damage. Tip: For transport on service truck, place container inside of plastic pail and immobilize pail.

# SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS: Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

PERSONAL PROTECTION:

EYES: Chemical splash goggles.

HANDS: Chemical resistant gloves; rubber, neoprene, or other impervious material.

RESPIRATORY: If mists/vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

FEET: Chemical resistant boots; rubber, neoprene, or other impervious material.

BODY: If major exposure is possible, wear suitable, impervious protective clothing.

#### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Yellowish, golden liquid. Bland odor.

VAPOR PRESSURE: Not determined

SOLUBILITY IN WATER: Complete

BOILING POINT: 212°F

EVAPORATION RATE (Butyl Acetate = 1): Not determined

## SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage. HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (Materials to Avoid): Reactive with oxidizing agents, acids, chlorinated hydrocarbons, acetone. Will react with some metals, e.g., aluminum, tin, zinc, to form flammable hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS: When exposed to fire, produces normal products of combustion.

## SECTION 11 TOXICOLOGICAL INFORMATION

For Potassium Hydroxide (1310-58-3): Oral LD50 (rat): 365 mg/kg. Primary skin irritation: (rabbit, 24hr) severe. Primary eye irritation: (rabbit, 24hr) severe.

## SECTION 12 ECOLOGICAL INFORMATION

For Potassium Hydroxide (1310-58-3): LC50 (96hr) Fathead minnow, 45% KOH solution = 179 mg/L.

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal of unused product is regulated under environmental and transportation laws as a corrosive waste. Dispose of container and unused contents in accordance with federal, state, and local requirements.

#### SECTION 14 TRANSPORT INFORMATION

U.S. Department of Transportation: Potassium Hydroxide Solution, 8, UN1814, PG II

## SECTION 15 REGULATORY INFORMATION

TSCA: All ingredients of this product are listed or are excluded from listing on the U.S. TSCA chemical substances inventory. CERCLA: Potassium Hydroxide (1310-58-3); RQ 1000 lbs.

SARA TITLE III: Section 311/312 Hazard Category: Acute: Yes Chronic: No Fire: No Pressure: No Reactive Hazard: Yes Section 313 Reportable Ingredients: None

## SECTION 16 OTHER INFORMATION

NFPA RATING: Health – 3, Flammability – 0, Reactivity – 1

HMIS<sup>®</sup> RATING: Health – 3, Flammability – 0, Reactivity – 2

HMIS<sup>®</sup> ratings are to be used with a fully implemented HMIS<sup>®</sup> program. HMIS<sup>®</sup> is a registered mark of the National Paint and Coatings Association (NPCA).

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