



# Neutralizer

## CLASSIFICATION

- Neutralizing Rinse Additive

## PRODUCT DESCRIPTION

- Neutralizer** is a liquid neutralizer agent for use in ultrasonic cleaners and automated washers for neutralizing alkaline residues left on surgical instruments, anesthetic utensils, laboratory equipment and washer equipment.
- Neutralizer** contains citric acid and a chelating agent.
- Neutralizer** is compatible with stainless steel, anodized aluminum and most non-ferrous metals.
- Neutralizer** will restore luster to tarnished equipment.
- Neutralizer** contains no surfactants.
- Neutralizer** is not a medical instrument sterilant or high level disinfectant.

## FEATURES AND BENEFITS

FEATURE	BENEFIT
Contains a rinsing agent	Rinses spot-free
Mild formula	Effectively neutralizes alkaline residues from surgical instruments without harm
Low foaming	Effective for use in all automated washers

## DIRECTIONS FOR USE

### Uses

- Neutralizing Rinse Additive for use in automated washing equipment.
- Solution is for use after cleaning with alkaline detergents. Prevents carryover of alkalinity on wash goods into subsequent rinse. Suitable for stainless steel instruments, basins, containers, glassware, and respiratory therapy articles.

### Precautionary Statements

- FOR INDUSTRIAL USE ONLY**
- KEEP OUT OF REACH OF CHILDREN**
- WARNING: CAUSES EYE AND SKIN IRRITATION.**
- Wear suitable gloves and eye protection.
- Wash thoroughly after handling.

### Directions

- Add 1/8 – ¼ oz per gallon of water or add 1-2 mL per liter of water. Dilutions vary depending upon temperature, soil load and water quality.

## SPECIFICATIONS

Contains	Proprietary, NJ0509135880810 Citric Acid	77-92-9
Physical state	Liquid	
Flash point	>100° C	
Color	Colorless	
Odor	Odorless	
pH	1.2 [Conc. (% w/w): 100%] (Use dilution: 2.8 to 3.4)	
Relative density	1.18	
Solubility	Easily soluble in the following materials: cold water and hot water.	

**ENVIRONMENT & DISPOSAL**

- ▀ **Hazard Rating:** Health – 2      Fire – 0      Physical Hazards – 0
- ▀ **WHMIS Canada:** Class E: Corrosive material.
- ▀ **Canada Inventory:** All components are listed or exempted.
- ▀ This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.
- ▀ **HCS USA:** Irritating material
- ▀ **U.S. Federal Regulations:**
- ▀ **TSCA 8 (b) Inventory:** All components are listed or exempted.
- ▀ **SARA 302/304/311/312 extremely hazardous substances:** No listed substance.
- ▀ **SARA 302/304 emergency planning and notification:** No listed substance.
- ▀ **SARA 313 Form R – report requirements:** No listed substance
- ▀ **California Prop 65:** No listed substance.
- ▀ **Waste Disposal – Product at Use Dilution - Canada & USA:** Diluted product can be flushed to sanitary sewer. Discard empty container trash.
- ▀ **RCRA Classification USA:** Unused product is D002 (Corrosive)

**STABILITY & HANDLING & STORAGE**

- ▀ **Product As Sold:**
- ▀ **Stability:** The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
- ▀ **Hazardous Decomposition**
- ▀ **Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- ▀ **Hazardous Polymerization:** Under normal conditions of storage and use, hazardous polymerization will not occur.
- ▀ **Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
- ▀ **Storage:** Keep out of reach of children. Store in a closed container.

**FIRST AID MEASURES**

- ▀ **Eye Contact:** In case of contact, immediately flush eyes with plenty of water. Remove contact lenses and flush again. Get medical attention if irritation persists.
- ▀ **Skin Contact:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- ▀ **Inhalation:** No special measures required. Treat symptomatically.
- ▀ **Ingestion:** Get medical attention if symptoms occur.

▀ **READ MATERIAL SAFETY DATA SHEET BEFORE USING PRODUCT.**

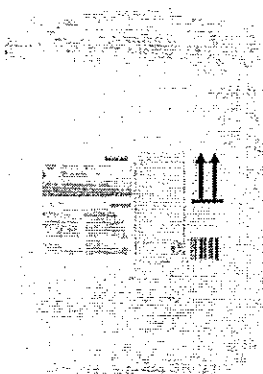
▀ **EMERGENCY HEALTH INFORMATION call:** 1-800-328-0026

▀ If located outside the United States and Canada, call collect, 1-651-222-5352 (number is in the US).

**TRANSPORTATION INFORMATION**

	UN number	Proper Name	Shipping	Class	Packaging Group	Additional Information
DOT/IMO/IMDG Classification	Not Regulated.	-	-	-	-	-

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes. See shipping documents for specific transportation information.

**PACKAGING & PRODUCT NUMBERS**

Size Available	Product Number
18.9 L (5 US Gal)	6044205 (sold in both USA & Canada)
56.8 L (15 US Gal)	6044215 (sold only in USA)

Document can be made available in French, upon request

**Worldwide Headquarters**  
370 Wabasha Street N St. Paul, MN 55102  
www.ecolab.com 1.866.781.8787

**Regional Office**  
5105 Tomken Road Mississauga, Ontario L4W 2X5  
Canada 1.800.352.5326



# Material Safety Data Sheet

NEUTRALIZER

**ECOLAB**<sup>®</sup>

## 1. Product and company identification

Trade name of product : NEUTRALIZER  
Product use : Instrument cleaner

Product dilution information : Up to 1/4 oz/gal or 2 mL/L in water

Supplier's information : Ecolab Healthcare Division  
370 Wabasha Street N  
St. Paul MN 55102  
5105 Tomken Road  
Mississauga ON L4W 2X5  
1-866-781-8787

Code : 913588-01

Date of issue : 08-September-2010

EMERGENCY HEALTH INFORMATION: 1-800-328-0026  
Outside United States and Canada CALL 1-651-222-5352 (in USA)

## 2. Hazards identification

**Product AS SOLD**  
Physical state : Liquid.  
Emergency overview : WARNING !  
No specific hazard.  
Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion

### Potential acute health effects

**Product AS SOLD**  
Eyes : Irritating to eyes.  
Skin : Irritating to skin.  
Inhalation : No known significant effects or critical hazards.  
Ingestion : No known significant effects or critical hazards.

See toxicological information (section 11)

### **Product AT USE DILUTION**

Liquid.  
CAUTION !  
No specific hazard.  
No specific hazard.

### **Product AT USE DILUTION**

No known significant effects or critical hazards.  
No known significant effects or critical hazards.  
No known significant effects or critical hazards.  
No known significant effects or critical hazards.

## 3. Composition/information on ingredients

### **Product AS SOLD**

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
CITRIC ACID	77-92-9	30 - 60

### **Product AT USE DILUTION**

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

## 4. First-aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: No known effect after eye contact. Rinse with water for a few minutes.	No known effect after eye contact. Rinse with water for a few minutes.
Skin contact	: No known effect after skin contact. Rinse with water for a few minutes.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
Ingestion	: Get medical attention if symptoms occur.	Get medical attention if symptoms occur.

## 5. Fire-fighting measures

### Product AS SOLD

Auto-ignition temperature	: Not available.
Flammable limits	: Not available.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special remarks on fire hazards	: Not available.
Special remarks on explosion hazards	: Not available.
Fire-fighting media and instructions	: Use an extinguishing agent suitable for the surrounding fire.  Dyke area of fire to prevent runoff. In a fire or if heated, a pressure increase will occur and the container may burst.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Use personal protective equipment as required.	Use personal protective equipment as required.
Environmental precautions	: Avoid contact of large amounts of spilt material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilt material and runoff with soil and surface waterways.
Methods for cleaning up	: Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

## 7. Handling and storage

	Product AS SOLD	Product AT USE DILUTION
Handling	: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.	Wash thoroughly after handling.
Storage	: Keep out of reach of children. Store in a closed container.	Keep out of reach of children.

## 8. Exposure controls/personal protection

## 8. Exposure controls/personal protection

Product AS SOLD		Product AT USE DILUTION
Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
<b>Personal protection</b>		
Eyes	: Safety eyewear should be used when there is a likelihood of exposure.	No protective equipment is needed under normal use conditions.
Hands	: For prolonged or repeated handling, use the following type of gloves: Impervious gloves.	No protective equipment is needed under normal use conditions.
Skin	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Respiratory	: No special protection is required.	No special protection is required.

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	Notations
No exposure limit value known.											

Consult local authorities for acceptable exposure limits.

## 9. Physical and chemical properties

Product AS SOLD		Product AT USE DILUTION
Physical state	: Liquid.	Liquid.
Flash point	: > 100°C	> 100°C
Colour	: Colourless.	Clear.
Odour	: Odourless.	Odourless.
pH	: 1.2 [Conc. (% w/w): 100%]	2.8 to 3.4
Boiling/condensation point	: Not available.	
Melting/freezing point	: Not available.	
Relative density	: 1.18	
Vapour pressure	: Not available.	
Vapour density	: Not available.	
Odour threshold	: Not available.	
Evaporation rate	: Not available.	
Viscosity	: Not available.	
Dispersibility properties	: Not available.	
Solubility	: Easily soluble in the following materials: cold water and hot water.	
LogK <sub>ow</sub>	: Not available.	

## 10. Stability and reactivity

Product AS SOLD	
Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions of instability	: Not available.
Reactivity	: Not available.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 10. Stability and reactivity

Hazardous polymerisation : Under normal conditions of storage and use, hazardous polymerisation will not occur.

## 11. Toxicological information

### Potential acute health effects

**Product AS SOLD**

Eyes : Irritating to eyes.

Skin : Irritating to skin.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

### Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

### Product AS SOLD

### Potential chronic health effects

Carcinogenic effects : No known significant effects or critical hazards.

Mutagenic effects : No known significant effects or critical hazards.

Teratogenic effects : No known significant effects or critical hazards.

Reproductive effects : No known significant effects or critical hazards.

Sensitization to Product : No known significant effects or critical hazards.

Synergistic products (toxicologically) : Not available.

### Toxicity data

Product/ingredient name	Test	Route	Result	Species
citric acid	LD50	Oral	3 g/kg	Rat
	LD50	Oral	11700 mg/kg	Rat
	LD50	Oral	7280 mg/kg	Mouse
	LD50	Oral	5040 mg/kg	Mouse
	LDLo	Oral	7 g/kg	Rabbit

### Other adverse effects

Target organs : Not available.

## 12. Ecological information

Ecotoxicity : Not reported

## 13. Disposal considerations

**Product AS SOLD**

Waste disposal : Diluted product can be flushed to sanitary sewer.  
Discard empty container in trash.

### Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

## 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

### Product AS SOLD

#### TDG Classification

TDG Classification

Proper shipping name

Class

## 14. Transport information

Packing group

For transport in bulk or using IMDG regulations, see shipping documents for specific transportation information.

Product AT USE DILUTION

Not intended for transport.

## 15. Regulatory information

Product AS SOLD

Product AT USE DILUTION

WHMIS

: Class E: Corrosive material

Not hazardous by WHMIS criteria.

Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## 16. Other information

Product AS SOLD

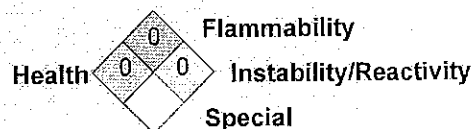
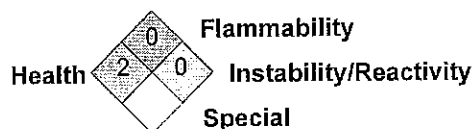
Product AT USE DILUTION

Hazardous Material :  
Information System (U.S.A.)

	0
Flammability	0
	0

Flammability	

National Fire Protection :  
Association (U.S.A.)



NFPA Aerosol Level :

Date of issue : 08-September-2010  
Date of previous issue : No previous validation  
Responsible name : Regulatory Affairs  
1-800-352-5326

☒ Indicates information that has changed from previously issued version.

### Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.