

Material Safety
Data Sheet

Item: pH Buffer Solution, pH 4.01
Date prepared: 1/01/03

Revision No: 3

<i>SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</i>			
Common Name/ Trade Name	Buffer Solution , pH 4.01	CAS#	N/A
Manufacturers Name	Circuit Research Corp. 702 South 7 th Street Delano, MN 55328 612-479-6525		
Synonym	N/A	IN CASE OF EMERGENCY	
Chemical Name	Mixture	Chemtree (24HR) 800-424-9300	
Chemical Family	N/A		
Supplier	H&S Technical Services, Inc. 1833 W Main St Ste 119 Mesa, AZ 85201 800-923-2486		

<i>SECTION 2. COMPOSITION/ INFORMATION ON INGREDIENTS</i>		
Name	CAS#	% by Weight
There is no components present in the product at levels which require reporting under SARA, Title III		

<i>SECTION 3. HAZARDS IDENTIFICATION</i>		
Potential Acute Health Effects	Not dangerous in case of skin contact (non-corrosive for skin, non-sensitizer for skin, non-permeator by skin), of inhalation	
Potential Chronic Health Effects	Not dangerous in case of skin contact (non-corrosive for skin, non-sensitizer for skin, non-permeator by skin), of inhalation, of ingestion.	
	Carcinogenic Effects:	Not available
	Mutagenic Effects:	Not available
	Teratogenic Effects:	Not available
Eye Contact	Minor irritant	

<i>SECTION 4. FIRST AID MEASURES</i>	
Eye Contact	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used.
Skin Contact	NO known EFFECT. Gently wash the contaminated skin with running water and non-abrasive soap.
Inhalation	Allow the victim to rest in a well-ventilated area. SEEK immediate medical attention
Ingestion	Remove dentures if any. INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. SEEK medical attention.

SECTION 5. FIRE AND EXPLOSION DATA

Flammability of the Product	Non-flammable
Auto-Ignition Temperature	N/A
Flash Points	N/A
Flammable Limits	N/A
Products of Combustion	N/A
Fire Hazards In Presence of Various Substances	N/A
Explosion Hazards In Presence of Various Substances	N/A
Fire Fighting Media And Instructions	Non-flammable
Special Remarks on Fire Hazards	Fires involving this material may release toxic gasses. Use self contained breathing apparatus when fighting fires.
Special Remarks on Explosion Hazards	No additional remarks

SECTION 6. ACCIDENTAL RELEASE MEASURES

Small Spill	Mop up, may be flushed to drain
Large Spill	No additional information in case of a spill and/or leak of this product. Mop up and dispose of according at local and regional authority requirements.

SECTION 7. HANDLING AND STORAGE

Precautions	None
Handling	Store in a closed container, cool dry, in well-ventilated area, away from source of heat.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
Personal Protection	Safety glasses may be worn
Exposure Limits	Not available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State and Appearance	Red Liquid, odorless			
PH	4.01		Refract Index	N/A
Boiling Point	100°C (212°F)		Surface Tension	N/A
Melting Point	32°F		% Volatile	N/A
Critical Temperature	N/A			
Water Solubility	Complete			
Viscosity	N/A			
Spec. Gravity	1.0			

SECTION 10. STABILITY AND REACTIVITY

Stability	Stable
Instability Temperature	Not Available
Conditions of Instability	No additional remark
Incompatibility With Various Substances	None Known
Polymerization	Does not occur
Hazardous Decomposition Products	Thermal decomposition or burning may produce poisonous gasses.

SECTION 11. TOXICOLOGICAL INFORMATION

Routes of Entry	Ingestion
Toxicity to Animals	LD50: Not available LC50: Not available
Chronic Effects on Humans	Toxicity of the product to the reproductive system: Not available
Special Remarks on Other Toxic Effects on Humans	Material is irritating to mucous membranes and upper respiratory tract.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	Not Available
BOD5 and COD	Not available
Products of Biodegradation	Some metallic oxides

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal	Recycle to process, if possible. Consult your local or regional authorities.
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SECTION 14. TRANSPORT INFORMATION

DOT Classification	Not a DOT controlled material (United States)
Special Provisions for Transport	N/A

SECTION 15. OTHER REGULATORY INFORMATION

Federal and State Regulations	The following products(s) is (are) listed on TSCA: NONE
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SECTION 16. OTHER INFORMATION

Catalog Number (s)	10003
References	Not Available
Notice to Reader All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. This information contained herein is based on data available at this time and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.	