

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.

## MART TECHNICAL SERVICES -ARCUS INC.

2450 Adie Rd.  
 Maryland Heights, MO 63043  
 800/543-6278  
 MEDICAL EMERGENCY 1-800-246-2890

PRODUCT NAME: **Titration Kit Refill (Titration Acid)**  
 PRODUCT DESCRIPTION: CLEAR LIQUID, MILD ACID ODOR  
 CHEMICAL FAMILY: MILD ACID  
 REVISION DATE: 12/23/04 PRINT DATE: 02/10/05 PRINT TIME: 16:29  
 Further Proper Shipping Names may be appropriate, depending on circumstances.

## SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS.

Hazard	CAS #	WT/Wt % Less Than	SARA Rep.
PHOSPHORIC ACID	7664-38-2	<15	
ACGIH TLV: 1 MG/M3 (TWA);			
OSHA PEL: 1 MG/M3 (TWA);			

NOTE 1 - Section 313 Supplier Notification: "1" identifies chemical ingredients subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986. This information should be included in all MSDS's that are copied and distributed for this material.

## SECTION 3 - HAZARDS IDENTIFICATION

HEALTH-----	2
INSTABILITY-----	0
FIRE-----	0
OTHER-----	X

Hazard Signal (short term contact or inhalation only)

THRESHOLD LIMIT VALUE: N.E., blended product. See Section 2 for information on listed ingredients.

PRIMARY ROUTES OF ENTRY: Eye contact, Skin contact, Inhalation of spray.

## EFFECTS OF ACUTE OVEREXPOSURE:

Eyes - Severe irritation, or burns possible.  
 Skin - Irritation, or burns possible with prolonged contact.  
 Inhalation of dust of mist of product or solution - Irritation of respiratory tract.  
 Swallowing - Irritation or burns of mouth, throat and stomach. Stomach upset.

EFFECTS OF CHRONIC OVEREXPOSURE: Unknown; none expected beyond acute effects.

CARCINOGENICITY: This product or its ingredients have not been identified as a carcinogen or probable carcinogen by NTP, IARC monographs, or OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Dermatitis and similar skin disorders.

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#### SECTION 4 - FIRST AID MEASURES.

EYES - Immediately flush with cool running water holding eye lids apart. Remove contact lenses if present, and continue flushing for 15 minnutes. Get medical assistance.

SKIN - Immediately flush with cool running water for 15 minutes. Remove contaminated clothing and-wash before reuse. If irritation or burn develops and persists, get medical advice or assistance.

INHALED - Remove to fresh air. Immediately call for medical advice or assistance if breathing difficulty or irritation is severe or continues.

SWALLOWED - Rinse mouth with large amounts of water. Drink water, milk or other fluids to dilute. Do not induce vomiting unless directed by medical personnel. Immediately call for medical advice or assistance.

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#### SECTION 5 - FIRE FIGHTING PROCEDURES

FLASH POINT	NONE
FLAMMABLE LIMITS LEL-UEL	NA

Extinguishing Media: as needed to surround fire.

Special Fire Fighting Procedures: For any chemical fire wear self-contained breathing apparatus and protective clothing to prevent contact.

Unusual Fire and Explosion hazards: None.

Hazardous Combustion products: Oxides of phosphorous.

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#### SECTION 6 - ACCIDENTAL RELEASE MEASURES.

Small Spills, less than 2 gallons: Wear glasses and rubber gloves and recover as practical. Neutralize area with sodium bicarbonate (baking soda), soda ash, lime, or general alkaline detergent. Flush to drain with excess water flow.

Large Spills: Only knowledgeable and properly protected people should work with a large spill. Get professional assistance if necessary.

Stop source of discharge if safe to do so. Evacuate unprotected personnel from the immediate area. Contain spilled material, and keep from discharging to surface waters. Recover to drum for later use, treatment or disposal. Recover using acid resistant pump, scoops, absorbent material, or other process as appropriate.

Neutralize contaminated area with sodium bicarbonate (baking soda), soda ash, lime, or general alkaline detergent. Flush to drain.

Notify local, state, or national authorities if required.

Disposal: Product and un-neutralized solutions are strongly acidic, and corrosive. Dispose of according to national, state, and local rules.

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### SECTION 7 - HANDLING AND STORAGE

Handling: Use appropriate protective clothing to avoid contact with product. Wash thoroughly after handling.

Storage: Keep container tightly closed. Keep from freezing - may rupture container.

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### SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION.

Ventilation: General or local to avoid exposure to irritating mists.

Respirator: NIOSH/MSHA approved respirator where conditions may cause exposure limits to be exceeded from mists of solutions.

Eye Protection: Glasses, goggles, and/or face shield to prevent eye exposure.

Protective Clothing: Acid resistant, impermeable gloves. Full body covering with rubber apron and shoes as needed to prevent contact.

Other Protective Equipment or Measures: Eye wash stations in the work area.

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### SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	212F
VAPOR PRESSURE (MM HG@70°F)	NE
SPECIFIC GRAVITY	1.12
VAPOR DENSITY (AIR=1)	NE
PERCENT VOLATILE	>50
EVAPORATION RATE (ETHER=1)	NE
SOLUBILITY IN WATER	COMPLETE
PH	1-2
APPEARANCE AND ODOR	SEE SECTION
V.O.C.	NONE

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### SECTION 10 - STABILITY AND REACTIVITY.

Stable: Yes. Hazardous Polymerization will not occur.

Conditions to Avoid: Contact with incompatible materials (see below).

Incompatible Materials: Strong oxidizing or reducing agents; alkaline materials; most metals, especially aluminum, zinc (will generate flammable hydrogen gas); leather, paper and other organic materials.

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**DISCLAIMER.**

The above information is, to the best of our knowledge, current, accurate, and complete based on information reasonably available to us as of the date of preparation of this form. However, it is the users's responsibility to determine the safety, toxicity and suitability for his or her own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by us as to the effects of such use or on the safety or toxicity of this product. Nor do we assume any liability arising out of use by others of the product. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when exceptional conditions or circumstances exist or because of applicable laws or regulations.

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NE = NOT ESTABLISHED / NA = NOT APPLICABLE

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