

## 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 P INDICATOR  
 PRODUCT DESCRIPTION: Clear liquid, alcohol odor  
 CHEMICAL FAMILY: Alcohol solution  
 REVISION DATE: 03/14/06 PRINT DATE: 03/17/08 PRINT TIME: 11:25

## SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS.

Hazard	CAS #	WT/Wt % Less Than
ISOPROPANOL	67-63-0	<50
ACGIH TLV: 400 PPM (TWA);		
OSHA PEL: 400 PPM (TWA);		
ACGIH & OSHA STEL: 500 PPM		

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-----	2
OTHER-----	x

HAZARD SIGNAL (short term contact or inhalation only):  
 (0=insignificant; 1=slight; 2=moderate; 3=high; 4=extreme)

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

PRIMARY ROUTES OF ENTRY: Skin contact, Inhalation.

## EFFECTS OF ACUTE OVEREXPOSURE:

Eyes - Irritation possible with contact or extensive exposure to vapors.

Skin - Dry skin, irritation possible with contact.

Inhalation - Short term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing larger amounts may be harmful. Symptoms of overexposure may include irritation to nose, throat, respiratory tract, impaired coordination, dizziness, drowsiness, fatigue, nausea, headache, low blood pressure and coma.

Swallowing - single dose oral toxicity is low. swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. Symptoms may include: nausea, vomiting, diarrhea, impaired coordination, pulmonary edema, kidney damage and coma.

EFFECTS OF CHRONIC OVEREXPOSURE: Isopropanol has been shown to cause harm to the fetus in laboratory animal studies. The relevance of these studies to humans is uncertain.

Effects in laboratory animals include mild, reversible kidney effects. Possible effects with extensive overexposure to 2-butoxyethanol

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include blood and kidney effects, based on animal studies.

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: Pre-existing lung disorders, and skin disorders may be aggravated from exposure to this product.

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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 MEASURES.

FLASH POINT 53F

FLAMMABLE LIMITS LEL-UEL NE

EXTINGUISHING MEDIA: dry chemical, regular foam, or carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self contained breathing apparatus, and protective clothing to prevent contact. Use water to cool containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May form hot explosive vapors in fire conditions. Vapors are heavier than air and may travel along ground and be ignited by distant flames, sparks or heat.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide.

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#### SECTION 6 - ACCIDENTAL RELEASE MEASURES.

SMALL SPILLS, less than 1 gallon: Eliminate sources of ignition. Assure area is ventillated. Absorb product with inert material such as rags or floor-dry, deposit in non-leaking container, and dampen with water. Wash area with soap and water.

LARGE SPILLS: Only knowledgeable and properly protected people should work with a large spill. Get professional assistance if necessary. Product contains isopropanol. Eliminate sources of ignition and stop source of discharge if safe to do so. Ventillate area. Contain spilled material, and keep from discharging to surface waters. Recover to drum for later use, treatment or disposal. Wash area with soap and water, capturing wash water for special disposal if necessary.

Notify local, state, or national authorities if required.

DISPOSAL: Product is combustible liquid. Check with local authorities about any possible restrictions.

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#### SECTION 7 - HANDLING AND STORAGE.

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HANDLING: >Avoid unnecessary contact with product. Avoid breathing vapors; use only in ventilated areas. Wash after use.  
 >Do not use near sources of ignition such as flames, sparks or high heat.  
 >Empty containers contain residue or vapors and should be handled with the same precautions and full containers.  
 >Prevent contact with incompatible materials; see Section 10.

STORAGE: Keep containers tightly closed. Store in cool place away from sources of heat, in a ventilated area.

DISPOSAL: Dispose of in accordance to local, state and federal regulations.

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

VENTILATION: General or local to avoid exposure to vapors and/or to mists if generated.

RESPIRATOR: NIOSH/MSHA approved respirator for organic vapors where conditions may cause exposure limits to be exceeded from vapors or mists of solutions.

EYE PROTECTION: Glasses, goggles, and/or face shield to prevent eye exposure.

PROTECTIVE CLOTHING: Solvent 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	NE
VAPOR PRESSURE (MM HG@70°F)	LIKE WATER
SPECIFIC GRAVITY	<1
VAPOR DENSITY (AIR=1)	NE
PERCENT VOLATILE	99
EVAPORATION RATE (ETHER=1)	NE
SOLUBILITY IN WATER	COMPLETE
PH	6
APPEARANCE AND ODOR	SEE SECTION 1

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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 agents, strong acids.

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**DISCLAIMER.**

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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 reponsibility 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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