

Material Safety Data Sheet

Product Name: pH 4.01 Buffer Solution	Order Code: 4010	Document No: TI-MSD-002
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Section 1

Manufacturer's Name TRANS INSTRUMENTS (S) PTE LTD	Telephone Number 65-67420367
Address No 5 Jalan Kilang Barat, #06-04/05, Petro Centre, Singapore 159349	Date Prepared 26-08-2010

Section 2- Hazard Ingredients/Identity Information

Hazardous Components Specific Chemical Identity; Common Name(s)	%	OSHA PEL	ACGIH TLV
Potassium Hydrogen Phthalate (CHCOOHCOOK)	1	None Listed	None Listed
Deionised Water (H ₂ O)	99	None Listed	None Listed

Section 3 - Physical/Chemical Characteristics

Boiling Point 750mm HG	100°C	Freezing Point	0°C
Vapor Pressure @ 25 °C	NA	Vapor Density (AIR=1)	NA
Specific Gravity (H₂O = 1)	1.0	Evaporation Rate (Butyl Acetate = 1)	NA
PH @ 25°C	4.01		
Solubility in Water	Miscible		
Appearance and Odor	Colourless and odorless liquid		

Section 4 - Fire and Explosion Hazard Data

Flash Point (Method Used) Not flammable	Auto-Ignition Temperature NA		
Flammable Limits in air % by volume	LEL NA	UEL NA	
Extinguishing Media	Water, CO ₂ , Dry chemical, foam or spray		
Special Fire Fighting Procedures	None, non-flammable		
Unusual Fire and Explosion Hazards	None		

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Section 5 - Reactivity Data

Stability Unstable Stable <input checked="" type="checkbox"/>	Conditions to Avoid None
Incompatibility (Materials to Avoid) : HNO ₃	
Hazardous Decomposition or Byproducts None	
Hazardous Polymerization May Occur Will Not Occur <input checked="" type="checkbox"/>	Conditions to Avoid None

Section 6 - Health Hazard Data

Route(s) of Entry:	Inhalation? No	Skin? Yes	Ingestion? Yes
Health Hazards (Acute and Chronic) Acute - low hazard due to the low levels of salt present. Chronic- possible irritation of skin upon prolonged exposure.			
Carcinogenicity:	NTP? Not found	IARC Monographs? Not found	OSHA Regulated? Not found
Signs and Symptoms of Exposure Skin irritation			
Medical Conditions Generally Aggravated by Exposure Could aggravate diseases of the skin.			
Emergency and First Aid Procedures Wash off contact area with water. If ingested, give large amounts of water. Contact physician.			

Section 7 - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled Wash down drain with excess water if local law allows.
Waste Disposal Method Consult Local Laws for proper disposal.
Precautions to Be taken in Handling and Storing Suitable for any general handling and storage.
Other Precautions None

Section 8 - Control Measures

Respiratory Protection (Specify Type) None		
Ventilation	Local Exhaust None	Special None
	Mechanical (General) None	Other None
Protective Gloves Colourless and odorless liquid	Eye Protection Safety glasses	
Other Protective Clothing or Equipment None		
Work/Hygienic Practices Emergency eyewash should be available. Wash hands after working with this product.		

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Section 9 – Transport Information

Not subject to transport regulations.