Safety Data Sheet



File version: 1

1M MIB Buffer pH 4.0

SDS Date: 07 Dec 2016

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PRODUCT CODES	1M MIB Buffer pH 4.0 1008246 1008247
MANUFACTURER: ADDRESS:	Rigaku Reagents 9009 New Trails Drive The Woodlands, TX 77381 USA
PHONE: EMAIL:	+1 (281) 362-2300 ReagentOrders@Rigaku.com
CHEMICAL NAME:	MIB Buffer
PREPARED BY:	Rigaku Reagents

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

Hazard description: Not applicable

Information pertaining to particular dangers for man and environment: The product does not have to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system: The Classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0-4) Health= 0 Fire= 0 Reactivity= 0

WHMIS-ratings (scale 0-4) Health= 0 Fire= 0 Reactivity= 0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Desription: Mixture of substances listed below with nonhazardous additions. Malonic acid 2.6%: CAS No. 141-82-2 Imidazole 2.6%: CAS No. 288-32-4 Boric acid 2.3%: CAS No. 233-139-2

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

After inhalation: Supply fresh air, consult doctor in case of complaints. After skin contact: Immediately wash with water and soap and rinse thoroughly. After eye contact: Rinse opened eye for several minutes under running water. After swallowing: If symptoms persist consult doctor.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing agents:



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CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. <u>Protective equipment:</u> No special measures required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Ensure adequate ventilation. Wear protective clothing.

ENVIRONMENTAL PRECAUTIONS: Do not allow to enter sewers/ surface or ground water.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

Handling:

Information for safe handling: Keep receptacles tightly sealed. Information about protection against explosions and fires: No special measures required.

Storage:

Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Not required. Further information about storage conditions: None.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data.

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Personal Protective equipment: General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required.

Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ The chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: clear, colorless

PHYSICAL STATE: liquid, clear



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pH AS SUPPLIED: 4 pH (Other): No data available

FLASH POINT: Not Applicable

AUTO IGNITING: Product is not selfigniting.

DANGER OF EXPLOSION: Product does not present an explosion hazard.

VAPOR PRESSURE AT 20°C: 23 hPa (17 mm Hg)

DENSITY: Not determined

SOLUBILITY IN /MISCIBILITY WITH WATER: Fully miscible.

SECTION 10: STABILITY AND REACTIVITY

Storage stability: Stable under recommended storage conditions.

Materials to avoid: Strong oxidizing agents.

Dangerous products of decomposition: Hazardous decomposition products formed under fire conditions- Carbon oxides, nitrogen oxides, Oxides of phosphorus, Lithium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Primary irritant effect:
On the skin: irritant to skin and mucous membranes.
On the eye: irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY No data available

PERSISTENCE AND DEGRADABILITY No data available

BIOACCUMULATIVE POTENTIAL No data available

MOBILITY IN SOIL No data available

PBT AND vPvB ASSESSMENT

No data available

SECTION 12 NOTES: Water hazard class 1 (Self-assessment): Slightly hazardous for water. Do not allow products to reach ground water, water course or sewage system.

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SECTION 13: DISPOSAL CONSIDERATIONS

PRODUCT:

Recommendations: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

UNCLEANED PACKAGINGS:

Recommendations: Disposal must be made according to official regulations. Recommend cleansing agent: Water, if necessary with cleansing agents.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

Not dangerous goods

WATER TRANSPORTATION

Not dangerous goods

AIR TRANSPORTATION

Not dangerous goods

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

OSHA HAZARDS: None of the ingredients is listed.

SARA SECTION 313: None of the ingredients is listed.

TSCA (Toxic Substance Control Act): Proposition 65 Chemicals Known to cause cancer: None of the ingredients is listed

Chemicals known to cause reproductive toxicity in females: None of the ingredients is listed

Chemicals known to cause reproductive toxicity in males: None of the ingredients is listed

Chemicals known to cause developmental toxicity: None of the ingredients is listed

Cancerogenity categories:

EPA: None of the ingredients is listed IARC: None of the ingredients is listed NTP: None of the ingredients is listed TLV: None of the ingredients is listed MAK: None of the ingredients is listed NIOSH-Ca: None of the ingredients is listed

PRODUCT RELATED HAZARD INFORMATION: Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.

WATER HAZARD CLASS: Water hazard class 1 (Self-assessment): slightly hazardous for water.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The above information is believed to be correct but does not necessarily include all information and should be used only as a guide. The information in this document is based on our current knowledge and applies to the product with regard to appropriate safety precautions. This document does not represent any guarantee of the properties of the product. Rigaku Reagents will not be held liable for any damage resulting from handling or contact with the above product.