Safety Data Sheet

File version: 1

HEPES/ Sodium hydroxide, 1M, pH 6.0

SDS Date: 18 Sep 2018

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 1M HEPES/Sodium hydroxide pH 6.0
SYNONYMS: N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid) 2-[4-(2-hydroxyethyl)piperazin-1-yl]ethanesufonic acid
PRODUCT CODES: 1008179
1008180
MANUFACTURER: Rigaku Reagents
ADDRESS: 9009 New Trails Drive
The Woodlands, TX 77381
USA
PHONE: +1 (281) 362-2300
EMAIL: ReagentOrders@Rigaku.com

CHEMICAL NAME: N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid)
CHEMICAL FORMULA: $C_8H_{18}N_2O_4S$

PREPARED BY: Rigaku Reagents

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

OSHA HAZARDS: No known OSHA hazards. Not a dangerous substance or mixture according to GHS.
POTENTIAL HEALTH EFFECTS:
EYES: May cause eye irritation.
SKIN: May be harmful if absorbed through skin. May cause skin irritation.
INGESTION: May be harmful if swallowed.
INHALATION: May be harmful if inhaled. May cause respiratory tract irritation.
OSHA HAZARDS: Carcinogen, target organ effect, toxic by inhalation, toxic by ingestion

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS: HEPES, Sodium hydroxide, De-ionized water

4-(2-HYDROXYETHYL)PIPERAZIN-1-YLETHANESULPHONIC ACID:

CAS NO.	% WT	% VOL
7365-45-9 22-25	22-25	

SODIUM HYDROXIDE:

CAS NO.	% WT	% VOL
1310-73-2		0.3-0.9

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Flush eyes with water as a precaution.

SKIN: Wash off with soap and plenty of water.

INGESTION: Never give anything by mouth to an unconscious person. Rinse mouth with water.

INHALATION: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT:
F: No data available
C: No data available

AUTOIGNITION TEMPERATURE:
F: No data available
C: No data available

NFPA HAZARD CLASSIFICATION
HEALTH: 0 **FLAMMABILITY: 0** **REACTIVITY: 0**

HMIS HAZARD CLASSIFICATION
HEALTH: 0 **FLAMMABILITY: 0** **REACTIVITY: 0**

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sodium oxides, Arsenic oxides

SECTION 5 NOTES: Not Flammable or combustible

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid breathing vapors, mist or gas.

ENVIRONMENTAL PRECAUTIONS: Do not let product enter drains.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Keep container tightly closed in a dry and well-ventilated place.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

EYE PROTECTION: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Wear impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

WORK HYGIENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: clear, colorless

PHYSICAL STATE: liquid, clear

pH AS SUPPLIED: 6.0 +/-0.02
pH (Other): No data available

BOILING POINT:
F: No data available
C: No data available

FREEZING POINT:
F: No data available
C: No data available

VAPOR PRESSURE (mmHg): No data available
@
F: No data available
C: No data available

VAPOR DENSITY (AIR = 1): No data available

SPECIFIC GRAVITY (H2O = 1): No data available
@
F: No data available
C: No data available

EVAPORATION RATE: No data available

SOLUBILITY IN WATER: No data available

MOLECULAR WEIGHT: 238.30 g/mol

VISCOSITY: No data available
@
F: No data available
C: No data available

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID (STABILITY): No data available

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sodium oxides, Arsenic oxides. Other decomposition products - no data available

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

ORAL LD50: No data available
INHALATION LC50: No data available
DERMAL LD50: No data available

SKIN CORROSION/IRRITATION: No skin irritation

SERIOUS EYE DAMAGE/EYE IRRITATION: No data available

RESPIRATORY OR SKIN SENSITIZATION: No data available

GERM CELL MUTAGENICITY: No data available

CARCINOGENICITY:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No data available

SECTION 11 NOTES:

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:

SECTION 13: DISPOSAL CONSIDERATIONS

PRODUCT: Offer surplus and non-recyclable solutions to a licensed disposal company.

CONTAMINATED PACKAGING: Dispose of as unused product.

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: Target Organ Effect

SARA 302 COMPONENTS: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 COMPONENTS: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 HAZARDS: No SARA hazards

MASSACHUSETTS RIGHT TO KNOW COMPONENTS:

No components are subject to the Massachusetts Right to Know Act.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS:

	CAS-No.
4-(2-Hydroxyethyl)piperazin-1-ylethanesulphonic acid	7365-45-9
Sodium hydroxide	1310-73-2
Water	7732-18-5

NEW JERSEY RIGHT TO KNOW COMPONENTS:

	CAS-No.
4-(2-Hydroxyethyl)piperazin-1-ylethanesulphonic acid	7365-45-9
Sodium hydroxide	1310-73-2
Water	7732-18-5

CALIFORNIA PROP. 65 COMPONENTS: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 15 NOTES:

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.