

Safety Data Sheet

File version: 1

CHES/Sodium hydroxide, 0.5M, pH 8.0

SDS Date: 29 Nov 2016

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 0.5M CHES/Sodium hydroxide pH 8.0
SYNONYMS: 2-(cyclohexylamino)ethanesulfonic acid
PRODUCT CODES: 1008024
 1008025
MANUFACTURER: Rigaku Reagents
ADDRESS: 9009 New Trails Drive
 The Woodlands, TX 77381
 USA
PHONE: +1 (281) 362-2300
EMAIL: ReagentOrders@Rigaku.com

CHEMICAL NAME: 2-(cyclohexylamino)ethanesulfonic acid
CHEMICAL FORMULA: C₈H₁₇NO₃S

PREPARED BY: Rigaku Reagents

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

OSHA HAZARDS: Irritant

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Signal word: Warning

Hazard statement(s):

H319 Causes serious eye irritation.

Precautionary statement(s):

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

POTENTIAL HEALTH EFFECTS:

EYES: Causes eye irritation.

SKIN: May be harmful if absorbed through skin. Causes skin irritation.

INGESTION: May be harmful if swallowed.

INHALATION: May be harmful if inhaled. Causes respiratory tract irritation.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS: 2-(cyclohexylamino)ethanesulfonic acid, Sodium hydroxide

2-(CYCLOHEXYLAMINO)ETHANESULFONIC ACID:

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>
103-47-9	9-12	

SODIUM HYDROXIDE:

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>
1310-73-2		0.1-0.5

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SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.**SKIN:** Wash off with soap and plenty of water. Consult a physician.**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.**INHALATION:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.**SECTION 4 NOTES:** Salivation, Nausea, Vomiting, Fever, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

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: 2

FLAMMABILITY: 0

REACTIVITY: 0

HMIS HAZARD CLASSIFICATION

HEALTH: 2

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, nitrogen oxides (NO_x), Sulfur oxides**SECTION 5 NOTES:**

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.**ENVIRONMENTAL PRECAUTIONS:** Do not let product enter drains.**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Keep in suitable, closed containers for disposal.**SECTION 6 NOTES:**

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection. Keep container tightly closed in a dry and well-ventilated place.**SECTION 7 NOTES:**

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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RESPIRATORY PROTECTION: Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

EYE PROTECTION: Safety glasses with side-shields conforming to EN166

SKIN PROTECTION: Handle with gloves. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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: 10.6-11.0
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

PERCENT SOLIDS BY WEIGHT: 9-12%(w/v)

MOLECULAR WEIGHT: 207.29 g mol⁻¹

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, nitrogen oxides (NO_x), Sulfur oxides

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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 data available**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 a 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: Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

CONTAMINATED PACKAGING: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

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Not dangerous goods

WATER TRANSPORTATION

Not dangerous goods

AIR TRANSPORTATION

Not dangerous goods

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

OSHA HAZARDS: Irritant.**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:** Fire hazard, acute health hazard, chronic health hazard**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:**

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

PENNSYLVANIA RIGHT TO KNOW COMPONENTS:

	<u>CAS-No.</u>
2-(Cyclohexylamino)ethanesulphonic acid	103-47-9
Sodium hydroxide	1310-73-2
Water	7732-18-5

NEW JERSEY RIGHT TO KNOW COMPONENTS:

	<u>CAS-No.</u>
2-(Cyclohexylamino)ethanesulphonic acid	103-47-9
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.