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| SDS | EFFECTIVE DATE 06/20/19 | ISOPURE  | REV D | SDS-CH00402 |
|-----|----------------------------|---|-------|-------------|

SAFETY DATA SHEET: Step 2 Cleaner MD400 Series (3,000 – 22,000 G.P.D.)



11851 PLANTSIDE DR.
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Safety Data Sheet

Step 2 Cleaner MD400 Series (3,000 – 22,000 G.P.D)

Product: Step 2 Cleaner MD400 Series

Preparation Date: 06/11/19

Rev D

Section 1 – Product and Company Identification

Product Chemical Name: Sodium Hydroxide 2.00N, Reagent

Chemical Formula: NaOH, 2.00N

Isopure Product Number: CH00402

Manufacture: Isopure Corporation
11851 Plantside Dr.
Louisville, KY 40299

For More Information Call: (502)267-7873

Recommended Use: Laboratory use

In Case of Emergency Call: CHEMTREC – 800-424-9300 or 703-527-3887

Synonyms: Caustic Soda Solution

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Section 2 – Hazard(s) Identification

***** Emergency Overview – Potential Health Effects*****

OSHA Hazards: Corrosive, Target organ effect

Target Organs: Kidney, Liver, Eyes, Skin, Mucous Membranes, Respiratory System, and Cardiovascular system

Signal Words: Danger

Pictograms:



GHS Classification:

| | |
|--------------------|------------|
| Skin corrosion | Category 1 |
| Serious eye damage | Category 1 |

GHS Label Elements, including precautionary statements:

Hazard Statements:

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|------|--|
| H314 | Causes severe skin burns and eye damage. |
|------|--|

Precautionary Statements:

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|----------------|---|
| P260 | Do not breathe dusts or mists. |
| P264 | Wash hands thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do not induce vomiting. |
| P303+P261+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| P363 | Wash contaminated clothing before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local regulations. |

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Potential Health Effects

| | |
|-------------------|---|
| Eyes | Causes severe eye burns. |
| Inhalation | May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. |
| Skin | May be harmful if absorbed through skin. Causes skin burns. |
| Ingestion | May be harmful if swallowed. |

NFPA Ratings

| | |
|------------------------|---------------|
| Health | 3 |
| Flammability | 0 |
| Reactivity | 0 |
| Specific hazard | Not Available |

HMIS Ratings

| | |
|-------------------|---------------|
| Health | 3 |
| Fire | 0 |
| Reactivity | 0 |
| Personal | Not Available |

Section 3 - Composition/Information on Ingredients

| Component | Weight % | CAS # | EINECS# / ELINCS# | Formula | Molecular Weight |
|------------------|----------|-----------|-------------------|------------------|------------------|
| Sodium Hydroxide | 7-9 | 1310-73-2 | 215-185-5 | NaOH | 40.00 g/mol |
| Water | Balance | 7732-18-5 | 231-791-2 | H ₂ O | 18.00 g/mol |

Section 4 - First-Aid Measures

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|-------------------|--|
| Eyes | Immediately rinse with plenty of water for at least 15 minutes and seek medical attention immediately. |
| Inhalation | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. |
| Skin | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention immediately. |
| Ingestion | Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention. |

Section 5 - Fire-Fighting Measures

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| Suitable (and unsuitable) extinguishing media | Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water. |
| Special protective equipment and precautions for firefighters | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. |
| Specific hazards arising from the chemical | Emits toxic fumes (sodium oxides) under fire conditions. (See also Stability and Reactivity section) |

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Section 6 - Accidental Release Measures

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| Personal precautions, protective equipment and emergency procedures | See section 8 for recommendations on the use of personal protective equipment. |
| Environmental precautions | Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements. |
| Methods and materials for containment and cleaning up | Neutralize spill. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. |

Section 7 - Handling and Storage

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

Section 8 - Exposure Controls / Personal Protection

Occupational exposure controls:

| Component | Exposure Limits | Basis | Entity |
|------------------|---------------------|-------|--------|
| Sodium Hydroxide | 2 mg/m ³ | CEIL | ACGIH |
| | 2 mg/m ³ | PEL | OSHA |
| | 2 mg/m ³ | CEIL | NIOSH |

- TWA:** Time Weighted Average over 8 hours of work.
- TLV:** Threshold Limit Value over 8 hours of work.
- REL:** Recommended Exposure Limit.
- PEL:** Permissible Exposure Limit.
- STEL:** Short term Exposure Limit during x minutes.
- IDLH:** Immediately Dangerous to Life or Health.
- WEEL:** Workplace Environmental Exposure Levels.
- CEIL:** Ceiling

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Personal Protection

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|-------------------|---|
| Eyes | Wear Chemical safety glasses or goggles. |
| Inhalation | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator. |
| Skin | Wear nitrile or rubber gloves, apron or lab coat. |
| Other | Not Available |

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

Section 9 - Physical and Chemical Properties

| | |
|---|------------------|
| Appearance (physical state, color, etc.) | Colorless liquid |
| Odor | Odorless |
| Odor threshold | Not Available |
| PH | Not Available |
| Melting point/freezing point | Not Available |
| Initial boiling point and boiling range | Not Available |
| Flash point | Not Flammable |
| Evaporation rate | Not Available |
| Flammability (solid, gas) | Not Flammable |
| Upper/lower flammability or explosive limit | Not Explosive |
| Vapor pressure | Not Available |
| Vapor density | Not Available |
| Specific gravity | 1.0752 |
| Solubility (ies) | Soluble in water |
| Partition coefficient: n-octanol/water | Not Available |
| Auto-ignition temperature | Not Applicable |
| Decomposition temperature | Not Available |

Section 10 - Stability and Reactivity

| | |
|---|--|
| Chemical Stability | Stable |
| Possibility of Hazardous Reactions | Will not occur |
| Conditions to Avoid | Not Available |
| Incompatible Materials | Acids, organic materials, chlorinated solvents, aluminum, phosphorous, zinc, tin |
| Hazardous Decomposition Products | Sodium oxides |

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Section 11 – Toxicological Information

Acute Toxicity

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|--------------------|---------------|
| Skin | Not Available |
| Eyes | Not Available |
| Respiratory | Not Available |
| Ingestion | Not Available |

Carcinogenicity

| | |
|--------------|--|
| IARC | No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| ACGIH | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP | No components 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 components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

Signs & Symptoms of Exposure

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|--------------------|--|
| Skin | Extent of damage depends on duration of contact. Burning, itching, redness, inflammation or swelling of exposed tissues. |
| Eyes | Eye burns, watering eyes. |
| Respiratory | Burning, choking, coughing, wheezing, laryngitis, shortness of breath, headache, nausea. |
| Ingestion | Burning, choking, nausea, vomiting, severe pain. |

| | |
|---------------------------------------|---------------|
| Chronic Toxicity | Not Available |
| Teratogenicity | Not Available |
| Mutagenicity | Not Available |
| Embryotoxicity | Not Available |
| Specific Target Organ Toxicity | Not Available |

Section 12 – Ecological Information

Ecotoxicity

| | |
|--------------------------------------|---------------|
| Aquatic Vertebrate | Not Available |
| Aquatic Invertebrate | Not Available |
| Terrestrial | Not Available |
| Persistence and Degradability | Not Available |
| Bioaccumulative Potential | Not Available |
| Mobility in soil | Not Available |
| PBT and vPvB Assessment | Not Available |
| Other Adverse Effects | Not Available |

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Section 13 – Disposable Considerations

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|---------------------------|--|
| Waste Residues | User should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container or residue. |
| Product Containers | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container. |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

Section 14 – Transportation Information

| | |
|-------------------------|---|
| US DOT | UN1824, Sodium hydroxide solution, 8, pg II |
| TDG | UN1824, SODIUM HYDROXIDE SOLUTION, 8, pg II |
| IMDG | UN1824, SODIUM HYDROXIDE SOLUTION, 8, pg II |
| Marine Pollutant | No |
| IATA/ICAO | UN1824, Sodium hydroxide solution, 8, pg II |

Section 15 – Regulatory Information

| | |
|----------------------------------|--|
| TSCA Inventory Status | All ingredients are listed on the TSCA inventory |
| DSCL (EEC) | All ingredients are listed on the DSCL inventory |
| California Proposition 65 | Not Listed |
| SARA 302 | Not Listed |
| SARA 304 | Not Listed |
| SARA 311 | Acute Health Hazard |
| SARA 312 | Acute Health Hazard |
| SARA 313 | Not Listed |
| WHMIS Canada | Class E: Corrosive material |

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Section 16 – Other Information

Other Product Information:

| REVISION | DATE |
|------------|----------|
| Revision C | 02/23/15 |
| Revision D | 06/18/19 |

Disclaimer

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