

## SAFETY DATA SHEET

Version 4.10  
Revision Date 06/02/2016  
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**1. PRODUCT AND COMPANY IDENTIFICATION****1.1 Product identifiers**

Product name : Column Preparation Solution  
Product Number : C2112  
Brand : Sigma

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Synthesis of substances

**1.3 Details of the supplier of the safety data sheet**

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA  
Telephone : +1 800-325-5832  
Fax : +1 800-325-5052

**1.4 Emergency telephone number**

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

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**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 GHS Label elements, including precautionary statements**

Pictogram



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation.

H319

Causes serious eye irritation.

Precautionary statement(s)

P264

Wash skin thoroughly after handling.

P280

Wear eye protection/ face protection.

P280

Wear protective gloves.

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338

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

P332 + P313

If skin irritation occurs: Get medical advice/ attention.

P337 + P313

If eye irritation persists: Get medical advice/ attention.

P362

Take off contaminated clothing and wash before reuse.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous components

| Component               | Classification        | Concentration  |
|-------------------------|-----------------------|--|
| <b>Sodium hydroxide</b> |                       |  |
| CAS-No.                 | 1310-73-2             | Met. Corr. 1; Skin Corr. 1A;<br>Eye Dam. 1; Aquatic Acute 3;<br>H290, H314, H318, H402 |
| EC-No.                  | 215-185-5             |  |
| Index-No.               | 011-002-00-6          |  |
| Registration number     | 01-2119457892-27-XXXX |  |
| >= 1 - < 5 %            |                       |  |

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

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## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

No data available

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 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.

### 6.4 Reference to other sections

For disposal see section 13.

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## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.  
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.  
Storage class (TRGS 510): Non Combustible Liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

| Component        | CAS-No.   | Value   | Control parameters | Basis   |
|------------------|-----------|---|--------------------|---|
| Sodium hydroxide | 1310-73-2 | TWA   | 2.000000 mg/m3     | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants        |
|                  |           | C   | 2.000000 mg/m3     | USA. ACGIH Threshold Limit Values (TLV)   |
|                  | Remarks   | Upper Respiratory Tract irritation<br>Eye irritation<br>Skin irritation |                    |   |
|                  |           | C   | 2 mg/m3            | USA. ACGIH Threshold Limit Values (TLV)   |
|                  |           | Upper Respiratory Tract irritation<br>Eye irritation<br>Skin irritation |                    |   |
|                  |           | C   | 2.000000 mg/m3     | USA. NIOSH Recommended Exposure Limits  |
|                  |           | C   | 2 mg/m3            | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

### 8.2 Exposure controls

#### Appropriate engineering controls

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

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side-shields conforming to EN166 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.

##### Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Do not let product enter drains.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|   |                               |
|---|-------------------------------|
| a) Appearance                                   | Form: liquid<br>Colour: clear |
| b) Odour  | No data available             |
| c) Odour Threshold                              | No data available             |
| d) pH   | 13.3                          |
| e) Melting point/freezing point                 | No data available             |
| f) Initial boiling point and boiling range      | No data available             |
| g) Flash point                                  | No data available             |
| h) Evaporation rate                             | No data available             |
| i) Flammability (solid, gas)                    | No data available             |
| j) Upper/lower flammability or explosive limits | No data available             |
| k) Vapour pressure                              | No data available             |
| l) Vapour density                               | No data available             |
| m) Relative density                             | No data available             |
| n) Water solubility                             | No data available             |
| o) Partition coefficient: n-octanol/water       | No data available             |
| p) Auto-ignition temperature                    | No data available             |
| q) Decomposition temperature                    | No data available             |
| r) Viscosity                                    | No data available             |
| s) Explosive properties                         | No data available             |
| t) Oxidizing properties                         | No data available             |

### 9.2 Other safety information

No data available

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

#### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Organic materials

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sodium oxides

Other decomposition products - No data available

In the event of fire: see section 5

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### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

##### Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

No data available

##### Skin corrosion/irritation

No data available

##### Serious eye damage/eye irritation

No data available

##### Respiratory or skin sensitisation

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

No data available

##### Specific target organ toxicity - single exposure

No data available

##### Specific target organ toxicity - repeated exposure

No data available

##### Aspiration hazard

No data available

##### Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 1824      Class: 8      Packing group: III

Proper shipping name: Sodium hydroxide solution

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

### IMDG

UN number: 1824      Class: 8      Packing group: III      EMS-No: F-A, S-B

Proper shipping name: SODIUM HYDROXIDE SOLUTION

### IATA

UN number: 1824      Class: 8      Packing group: III

Proper shipping name: Sodium hydroxide solution

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## 15. REGULATORY INFORMATION

### 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

Sodium hydroxide

CAS-No.  
1310-73-2

Revision Date  
2007-03-01

### Pennsylvania Right To Know Components

Water

CAS-No.  
7732-18-5

Revision Date

Sodium hydroxide 1310-73-2 2007-03-01

**New Jersey Right To Know Components**

|                  | CAS-No.   | Revision Date |
|------------------|-----------|---------------|
| Water            | 7732-18-5 |               |
| Sodium hydroxide | 1310-73-2 | 2007-03-01    |

**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.

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**16. OTHER INFORMATION**

**Full text of H-Statements referred to under sections 2 and 3.**

|               |  |
|---------------|--|
| Aquatic Acute | Acute aquatic toxicity                   |
| Eye Dam.      | Serious eye damage                       |
| H290          | May be corrosive to metals.              |
| H314          | Causes severe skin burns and eye damage. |
| H315          | Causes skin irritation.                  |
| H318          | Causes serious eye damage.               |
| H319          | Causes serious eye irritation.           |
| H402          | Harmful to aquatic life.                 |
| Met. Corr.    | Corrosive to metals                      |
| Skin Corr.    | Skin corrosion                           |

**HMIS Rating**

|                        |   |
|------------------------|---|
| Health hazard:         | 3 |
| Chronic Health Hazard: |   |
| Flammability:          | 0 |
| Physical Hazard        | 0 |

**NFPA Rating**

|                    |   |
|--------------------|---|
| Health hazard:     | 2 |
| Fire Hazard:       | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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**Preparation Information**

Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956

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