1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Hydroxyethyl-cellulose

Product Number: 09368
Brand: Sigma
CAS-No.: 9004-62-0

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Sigma-Aldrich Chemie BV
Stationsplein 4
3331 LL ZWIJNDRECHT
NETHERLANDS

Telephone: +31 78-620-5411
Fax: +31 78-620-5421
E-mail address: eurtechserv@sial.com

1.4 Emergency telephone number

Emergency Phone #: 112

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 Label elements

Caution - substance not yet tested completely.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.
4.2 Most important symptoms and effects, both acute and delayed
4.3 Indication of any immediate medical attention and special treatment needed
   no data available

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
   Carbon oxides
5.3 Advice for firefighters
   Wear self-contained breathing apparatus for fire fighting if necessary.
5.4 Further information
   no data available

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
   Avoid dust formation. Avoid breathing vapors, mist or gas.
6.2 Environmental precautions
   Do not let product enter drains.
6.3 Methods and materials for containment and cleaning up
   Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
   For disposal see section 13.

7. HANDLING AND STORAGE
7.1 Precautions for safe handling
   Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
7.2 Conditions for safe storage, including any incompatibilities
   Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
7.3 Specific end uses
   no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1 Control parameters
   Components with workplace control parameters
8.2 Exposure controls
   Appropriate engineering controls
   General industrial hygiene practice.
   Personal protective equipment
   Eye/face 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.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Immersion protection**
- Material: Nitrile rubber
- Minimum layer thickness: 0.11 mm
- Break through time: > 480 min
- Material tested: Dermatril® (Aldrich Z677272, Size M)

**Splash protection**
- Material: Nitrile rubber
- Minimum layer thickness: 0.11 mm
- Break through time: > 30 min
- Material tested: Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Appearance</td>
<td>Form: powder, Colour: beige</td>
</tr>
<tr>
<td>b) Odour</td>
<td>no data available</td>
</tr>
<tr>
<td>c) Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>d) pH</td>
<td>no data available</td>
</tr>
<tr>
<td>e) Melting point/freezing point</td>
<td>no data available</td>
</tr>
<tr>
<td>f) Initial boiling point and boiling range</td>
<td>no data available</td>
</tr>
<tr>
<td>g) Flash point</td>
<td>no data available</td>
</tr>
<tr>
<td>h) Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>i) Flammability (solid, gas)</td>
<td>no data available</td>
</tr>
<tr>
<td>j) Upper/lower flammability or explosive limits</td>
<td>no data available</td>
</tr>
<tr>
<td>k) Vapour pressure</td>
<td>no data available</td>
</tr>
<tr>
<td>l) Vapour density</td>
<td>no data available</td>
</tr>
<tr>
<td>m) Relative density</td>
<td>no data available</td>
</tr>
<tr>
<td>n) Water solubility</td>
<td>no data available</td>
</tr>
<tr>
<td>o) Partition coefficient: n-octanol/water</td>
<td>no data available</td>
</tr>
</tbody>
</table>
p) Autoignition 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

10. STABILITY AND REACTIVITY

10.1 Reactivity
    no data available

10.2 Chemical stability
    no data available

10.3 Possibility of hazardous reactions
    no data available

10.4 Conditions to avoid
    no data available

10.5 Incompatible materials
    Strong oxidizing agents

10.6 Hazardous decomposition products
    Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

   Acute toxicity
   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 probable, possible or confirmed human carcinogen by IARC.

   Reproductive toxicity
   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

   Potential health effects
**Inhalation**
May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion**
May be harmful if swallowed.

**Skin**
May be harmful if absorbed through skin. May cause skin irritation.

**Eyes**
May cause eye irritation.

**Additional Information**
RTECS: Not available

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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**
no data available

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.

**Contaminated packaging**
Dispose of as unused product.

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14. **TRANSPORT INFORMATION**

14.1 **UN number**
ADR/RID: -  
IMDG: -  
IATA: -

14.2 **UN proper shipping name**
ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

14.3 **Transport hazard class(es)**
ADR/RID: -  
IMDG: -  
IATA: -

14.4 **Packaging group**
ADR/RID: -  
IMDG: -  
IATA: -

14.5 **Environmental hazards**
ADR/RID: no  
IMDG Marine pollutant: no  
IATA: no

14.6 **Special precautions for user**
no data available

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15. **REGULATORY INFORMATION**
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**
no data available

15.2 **Chemical Safety Assessment**
no data available
16. OTHER INFORMATION

Further information
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