

## DISHWASH DETERGENT (HARD WATER)

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 - Product identifier

Trade name/designation DISHWASH DETERGENT (HARD WATER)

Chemical name

Product-type Mixture

Product code 40200CO BVH

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

Relevant identified uses

- PC35: Washing and cleaning products  
(including solvent based products).

#### 1.3 - Details of the supplier of the safety data sheet

Biovate Hygienics Ltd  
Grafton House  
Pury Hill Business Park  
NN12 7LS Towcester United Kingdom  
Telephone: 01328 851407  
Website: [www.biovatehygienics.com](http://www.biovatehygienics.com)  
Email: [info@biovatehygienics.com](mailto:info@biovatehygienics.com)

#### 1.4 - Emergency telephone number

United Kingdom: NHS Direct:111

### SECTION 2: Hazards identification

#### 2.1 - Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

|               |                                  |
|---------------|----------------------------------|
| Met. Corr. 1  | Corrosive to metals - Category 1 |
| Skin Corr. 1A | Skin corrosion, Category 1A      |
| Eye Dam. 1    | Serious eye damage, Category 1   |

#### 2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains: sodium hydroxide (CAS No.: 1310-73-2)

Signal word : Danger

Hazard pictograms



Hazard statements

|      |   |
|------|---|
| H290 | May be corrosive to metals              |
| H314 | Causes severe skin burns and eye damage |

Precautionary statements

|      |                                  |
|------|----------------------------------|
| P234 | Keep only in original packaging. |
|------|----------------------------------|

## DISHWASH DETERGENT (HARD WATER)

|                |   |
|----------------|---|
| P260           | Do not breathe dust/fume/vapours/spray.   |
| 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+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].                              |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.  |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.      |
| P363           | Wash contaminated clothing before reuse.  |
| P390           | Absorb spillage to prevent material damage.   |
| P405           | Store locked up.  |
| P501           | Dispose of contents/container to an appropriate recycling or disposal facility in accordance with local/regional/national regulation. |

EUH-phrases : None

### 2.3 - Other hazards

PBT-substance. - This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

## SECTION 3: Composition / information on ingredients

### 3.1 - Substances

Not applicable

### 3.2 - Mixtures

| Chemical name    | No  | %      | Class(es)  | Specific concentration limit |
|------------------|---|--------|--|------------------------------|
| sodium hydroxide | CAS No. : 1310-73-2<br>Index No. : 011-002-00-6<br>EC No. : 215-185-5 | 0 - 15 | Eye Dam. 1 - H318<br>Met. Corr. 1 - H290<br>Skin Corr. 1A - H314 | Not applicable               |

## SECTION 4: First aid measures

### 4.1 - Description of first aid measures

|                               |   |
|-------------------------------|---|
| <u>Following inhalation</u>   | - IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>- Medical examination necessary even merely on suspicion of intoxication.                                 |
| <u>Following skin contact</u> | - After contact with skin, wash immediately with plenty of water and soap.<br>- Remove contaminated, saturated clothing immediately.<br>- In case of skin reactions, consult a physician. |
| <u>After eye contact</u>      | - In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.                                  |
| <u>After ingestion</u>        | - If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.  |

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

## DISHWASH DETERGENT (HARD WATER)

|  |   |
|--|---|
| <u>Symptoms and effects - Following inhalation</u>   | - There may be shortness of breath and irritation of the throat and chest.  |
| <u>Symptoms and effects - Following skin contact</u> | - Causes skin irritation.<br>- Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc. |
| <u>Symptoms and effects - After eye contact</u>      | - Serious eye damage/eye irritation   |
| <u>Symptoms and effects - After ingestion</u>        | - Burns may appear around the lips. Blood may be vomited. Bleeding may occur from the mouth/nose.   |

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

- Treat symptomatically.
- Eye bathing equipment should be available on site.

## SECTION 5: Firefighting measures

### 5.1 - Extinguishing media

|                                     |   |
|-------------------------------------|---|
| <u>Suitable extinguishing media</u> | - ABC-powder<br>- Carbon dioxide (CO <sub>2</sub> )<br>- Foam<br>- Extinguishing powder |
|-------------------------------------|---|

|                                       |                  |
|---------------------------------------|------------------|
| <u>Unsuitable extinguishing media</u> | - Full water jet |
|---------------------------------------|------------------|

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

|  |   |
|--|---|
| <u>Special hazards arising from the substance or mixture</u> | - Corrosive<br><br>- Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. |
|--|---|

### 5.3 - Advice for firefighters

- Co-ordinate fire-fighting measures to the fire surroundings.
- Wear a self-contained breathing apparatus and chemical protective clothing.

## SECTION 6: Accidental release measures

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

|                                    |   |
|------------------------------------|---|
| <u>For non-emergency personnel</u> | - If outside, keep bystanders upwind and away from danger point.<br>- Mark out the contaminated area with signs and prevent access to unauthorised access.<br>- Notify the police and fire brigade immediately in the case of large spills.<br>- Use personal protection equipment.<br>- Turn leaking containers upside to prevent further escape of liquid |
| <u>For emergency responders</u>    | - No information available.   |

## DISHWASH DETERGENT (HARD WATER)

### 6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.
- Contain the spillage using bunding.

### 6.3 - Methods and material for containment and cleaning up

|   |  |
|---|--|
| <u>Methods and material for containment</u> | - Soak up inert absorbent and dispose as waste requiring special attention.  |
| <u>Methods and material for cleaning up</u> | - Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).<br>- Clear contaminated areas thoroughly. |
| <u>Inappropriate techniques</u>             | - No information available.  |

### 6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

## SECTION 7: Handling and storage

### 7.1 - Precautions for safe handling

|  |  |
|--|--|
| <u>Recommendation</u>                          | - Avoid: Eye contact<br>- Avoid: Skin contact<br>- Ensure adequate ventilation   |
| <u>Advices on general occupational hygiene</u> | - Wash contaminated clothing prior to re-use.<br>- Wash hands before breaks and after work.<br>- When using do not eat, drink, smoke, sniff. |

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

- Store in a place accessible by authorized persons only.
- Keep away from: Food and feedingstuffs
- Only use containers specifically approved for the substance/product.
- Keep container tightly closed in a cool, well-ventilated place.

### 7.3 - Specific end use(s)

## SECTION 8: Exposure controls/personal protection

### 8.1 - Control parameters

### 8.2 - Exposure controls

|  |   |
|--|---|
| <u>Appropriate engineering controls</u>                                      | - Ensure there is sufficient ventilation      |
| <u>Individual protection measures, such as personal protective equipment</u> | - Eye protection<br><br>- Protective Clothing |



## DISHWASH DETERGENT (HARD WATER)

- Protective gloves



- Self contained breathing apparatus  
must be available in case of emergency  
- Wash hands thoroughly after handling.

### SECTION 9: Physical and chemical properties

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

| Physical state                | Liquid     | Appearance        | Liquid         |
|-------------------------------|------------|-------------------|----------------|
| Colour                        | colourless | Odour             | characteristic |
| Odour threshold               |            | No data available |                |
| pH                            |            | > 11.5            |                |
| Melting point                 |            | No data available |                |
| Freezing point                |            | No data available |                |
| Boiling point                 |            | 103 °C            |                |
| Flash point                   |            | > 93 °C           |                |
| Evaporation rate              |            | No data available |                |
| flammability                  |            | No data available |                |
| Lower explosion limit         |            | No data available |                |
| Upper explosion limit         |            | No data available |                |
| Vapour pressure               |            | No data available |                |
| Vapour density                |            | No data available |                |
| Relative density              |            | No data available |                |
| Density                       |            | No data available |                |
| Solubility (Water)            |            | Soluble in water. |                |
| Solubility (Ethanol)          |            | No data available |                |
| Solubility (Acetone)          |            | No data available |                |
| Solubility (Organic solvents) |            | No data available |                |
| Log KOC                       |            | No data available |                |
| Auto-ignition temperature     |            | No data available |                |
| Decomposition temperature     |            | No data available |                |
| Kinematic viscosity           |            | No data available |                |
| Dynamic viscosity             |            | Non-viscous       |                |
| Particle characteristics      |            |                   |                |
| Particle size                 |            | No data available |                |

#### 9.2 - Other information

|                         |                   |
|-------------------------|-------------------|
| VOC content             | No data available |
| Minimum ignition energy | No data available |
| Conductivity            | No data available |

### SECTION 10: Stability and reactivity

## DISHWASH DETERGENT (HARD WATER)

### 10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

### 10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

### 10.4 - Conditions to avoid

- Avoid direct sunlight.
- Avoid excessive heat for prolonged periods of time.

### 10.5 - Incompatible materials

- Strong Acids and Oxidising Agents

### 10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.
- Thermal decomposition can lead to the escape of irritating gases and vapours.

## SECTION 11: Toxicological information

### 11.1 - Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - Not classified

Toxicity : Mixture

|                                       |                   |
|---------------------------------------|-------------------|
| LD50 oral (rat)                       | No data available |
| LD50 dermal (rat)                     | No data available |
| LD50 dermal (rabbit)                  | No data available |
| LC50 inhalation (rat)                 | No data available |
| LC50 inhalation dusts and mists (rat) | No data available |
| LC50 inhalation vapours (rat)         | No data available |

- Based on available data, the classification criteria are not met.

Skin corrosion/irritation - Skin corrosion, Category 1A - Causes severe skin burns and eye damage

- Corrosive.

Serious eye damage/eye irritation - Serious eye damage, Category 1

- Risk of serious damage to eyes.
- Causes serious eye irritation.
- Corrosive.

Respiratory or skin sensitisation - Not classified

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

## DISHWASH DETERGENT (HARD WATER)

Reproductive toxicity - Not classified

STOT-single exposure - Not classified

STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

### 11.2 - Information on other hazards

## SECTION 12: Ecological information

### 12.1 - Toxicity

Toxicity : Mixture

|                                   |                   |
|-----------------------------------|-------------------|
| EC50 48 hr crustacea              | No data available |
| LC50 96 hr fish                   | No data available |
| ErC50 algae                       | No data available |
| ErC50 other aquatic plants        | No data available |
| NOEC chronic fish                 | No data available |
| NOEC chronic crustacea            | No data available |
| NOEC chronic algae                | No data available |
| NOEC chronic other aquatic plants | No data available |

Toxicity : Substances

sodium hydroxide (1310-73-2)

|                      |           |
|----------------------|-----------|
| EC50 48 hr crustacea | 156 mg/l  |
| LC50 96 hr fish      | 55.6 mg/l |

- The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

### 12.2 - Persistence and degradability

|                                 |                   |
|---------------------------------|-------------------|
| Biochemical oxygen demand (BOD) | No data available |
| Chemical oxygen demand (COD)    | No data available |
| % of biodegradation in 28 days  | No data available |

- No information available.

### 12.3 - Bioaccumulative potential

|                               |                   |
|-------------------------------|-------------------|
| Bioconcentration factor (BCF) | No data available |
| Log KOC                       | No data available |

- No indication of bioaccumulation potential.

### 12.4 - Mobility in soil

- No information available.

### 12.5 - Results of PBT and vPvB assessment

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

### 12.6 - Endocrine disrupting properties

## DISHWASH DETERGENT (HARD WATER)

### 12.7 - Other adverse effects

- No information available.

## SECTION 13: Disposal considerations

### 13.1 - Waste treatment methods

|   |  |
|---|--|
| <u>Waste treatment methods</u>                      | - Dispose of waste according to applicable legislation.  |
| <u>Sewage disposal</u>                              | - No information available.  |
| <u>Special precautions for waste treatment</u>      | - Waste for disposal is to be classified and labelled.<br>- Do not mix with other wastes.<br>- Consult the appropriate local waste disposal expert about waste disposal. |
| <u>Community or national or regional provisions</u> | - No information available.  |

## SECTION 14: Transport information

### 14.1 - UN number or ID number

|                         |   |                |
|-------------------------|---|----------------|
| <u>UN number (ADR)</u>  | : | UN1719         |
| <u>UN number (RID)</u>  | : | Not applicable |
| <u>UN number (ADN)</u>  | : | Not applicable |
| <u>UN number (IMDG)</u> | : | Not applicable |
| <u>UN number (IATA)</u> | : | Not applicable |

### 14.2 - UN proper shipping name

|                                      |   |                               |
|--------------------------------------|---|-------------------------------|
| <u>UN proper shipping name (ADR)</u> | : | CAUSTIC ALKALI LIQUID, N.O.S. |
|--------------------------------------|---|-------------------------------|

### 14.3 - Transport hazard class(es)

|                                       |   |    |
|---------------------------------------|---|----|
| <u>ADR Transport hazard class(es)</u> | : | 8  |
| <u>ADR Classification code:</u>       | : | C5 |
| <u>Pictograms</u>                     |   |    |



Pictograms

### 14.4 - Packing group

|                      |   |     |
|----------------------|---|-----|
| <u>Packing group</u> | : | III |
|----------------------|---|-----|

### 14.5 - Environmental hazards

|                              |   |    |
|------------------------------|---|----|
| <u>Environmental hazards</u> | : | No |
| <u>Marine pollutant</u>      | : | No |

### 14.6 - Special precautions for user



## DISHWASH DETERGENT (HARD WATER)

### ADR

|   |   |                 |
|---|---|-----------------|
| ADR Classification code:                                  | : | C5              |
| ADR Special provisions                                    | : | 274             |
| ADR Limited quantity (LQ)                                 | : | 5L              |
| ADR Excepted quantities                                   | : | E1              |
| ADR Packing instructions                                  | : | P001 IBC03 R001 |
| ADR Special packing provisions                            | : |                 |
| ADR Mixed packing provisions                              | : | MP19            |
| Instructions for portable tanks and bulk containers       | : | T7              |
| Special provisions for portable tanks and bulk containers | : | TP1 TP28        |
| ADR tank code   | : | L4BN            |
| ADR tanks special provisions                              | : |                 |
| Vehicle for tank carriage                                 | : | AT              |
| ADR Transport category                                    | : | 3               |
| ADR Tunnel restriction code                               | : | E               |
| ADR Special provisions loading, unloading and handling    | : |                 |
| Special provisions - Packages                             | : | V12             |
| Special provisions - Bulk                                 | : |                 |
| Special provisions - Operation                            | : |                 |
| ADR Hazard identification number (Kemler No.)             | : | 80              |

### 14.7 - Maritime transport in bulk according to IMO instruments

## SECTION 15: Regulatory information

### 15.1 - Safety, health and environmental regulations/legislation specific for the substance or mixture

|                             |                   |
|-----------------------------|-------------------|
| Substances REACH candidates | None              |
| Substances Annex XIV        | None              |
| Substances Annex XVII       | None              |
| VOC content                 | No data available |

### 15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

## SECTION 16: Other information

### SDS versions

| Version | Issue date | Author | Description of the amendments |
|---------|------------|--------|-------------------------------|
| 1       | 07/02/2022 |        |                               |

### Texts of the regulatory sentences

|              |   |
|--------------|---|
| Eye Dam. 1   | Serious eye damage, Category 1          |
| H290         | May be corrosive to metals              |
| H314         | Causes severe skin burns and eye damage |
| Met. Corr. 1 | Corrosive to metals - Category 1        |

---

## DISHWASH DETERGENT (HARD WATER)

---

|               |                             |
|---------------|-----------------------------|
| Skin Corr. 1A | Skin corrosion, Category 1A |
|---------------|-----------------------------|

\*\*\* \*\*