



# Safety Data Sheet

According to Regulation (EC) No 1907/2006

## ZENITH 6E GLASS & STAINLESS STEEL CLEANER

Revision: 2020-12-14

Version: 01.0

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

#### 1.1 Product identifier

Trade name: ZENITH 6E GLASS & STAINLESS STEEL CLEANER

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

##### Identified uses:

For professional use only.

AISE-P301 - General purpose cleaner. Manual process

AISE-P302 - General purpose cleaner. Spray and wipe manual process

Uses advised against: Uses other than those identified are not recommended

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

Diversey Ltd, Weston Favell Centre, Northampton NN3 8PD, United Kingdom

#### Contact details

Zenith Hygiene Group

A1M Business Centre Dixons Hill Road Welham Green

Herts AL9 7JE

www.zhgplc.com

01707 270260

helpdesk@zhgplc.com

#### 1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

For medical or environmental emergency only:

call 0800 052 0185

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Not classified as hazardous

#### 2.2 Label elements

##### Hazard statements:

EUH210 - Safety data sheet available on request.

#### 2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

| Ingredient(s)   | EC number | CAS number | REACH number     | Classification   | Notes | Weight percent |
|-----------------|-----------|------------|------------------|--|-------|----------------|
| 2-butoxyethanol | 203-905-0 | 111-76-2   | 01-2119475108-36 | Acute Tox. 4 (H302)<br>Acute Tox. 4 (H312)<br>Acute Tox. 4 (H332)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319) |       | 3-10           |
| propan-2-ol     | 200-661-7 | 67-63-0    | 01-2119457558-25 | Flam. Liq. 2 (H225)<br>STOT SE 3 (H336)<br>Eye Irrit. 2 (H319)   |       | 1-3            |

Workplace exposure limit(s), if available, are listed in subsection 8.1.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16.

ATE, if available, are listed in section 11.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

|  |   |
|--|---|
| <b>Inhalation:</b>                     | Get medical attention or advice if you feel unwell.   |
| <b>Skin contact:</b>                   | Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.  |
| <b>Eye contact:</b>                    | Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.  |
| <b>Ingestion:</b>                      | Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell. |
| <b>Self-protection of first aider:</b> | Consider personal protective equipment as indicated in subsection 8.2.  |

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

|                      |   |
|----------------------|---|
| <b>Inhalation:</b>   | No known effects or symptoms in normal use. |
| <b>Skin contact:</b> | No known effects or symptoms in normal use. |
| <b>Eye contact:</b>  | No known effects or symptoms in normal use. |
| <b>Ingestion:</b>    | No known effects or symptoms in normal use. |

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

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

No special hazards known.

### 5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

## SECTION 6: Accidental release measures

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

No special measures required.

### 6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

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

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

### 6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Measures to prevent fire and explosions:

No special precautions required.

#### Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

#### Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products.

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

Store in accordance with local and national regulations. Keep only in original packaging.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

### 7.3 Specific end use(s)

No specific advice for end use available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Workplace exposure limits

Air limit values, if available:

| Ingredient(s)   | UK - Long term value(s)          | UK - Short term value(s)          |
|-----------------|----------------------------------|-----------------------------------|
| 2-butoxyethanol | 25 ppm<br>123 mg/m <sup>3</sup>  | 50 ppm<br>246 mg/m <sup>3</sup>   |
| propan-2-ol     | 400 ppm<br>999 mg/m <sup>3</sup> | 500 ppm<br>1250 mg/m <sup>3</sup> |

Biological limit values, if available:

#### Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

#### DNEL/DMEL and PNEC values

##### Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

| Ingredient(s)   | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|-----------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| 2-butoxyethanol | -                          | 26.7                          | -                         | 6.3                          |
| propan-2-ol     | -                          | -                             | -                         | 26                           |

DNEL dermal exposure - Worker

| Ingredient(s)   | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|-----------------|----------------------------|--|---------------------------|---|
| 2-butoxyethanol | -                          | 89                                       | -                         | 125                                     |
| propan-2-ol     | No data available          | -  | No data available         | 888                                     |

DNEL dermal exposure - Consumer

| Ingredient(s)   | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|-----------------|----------------------------|--|---------------------------|---|
| 2-butoxyethanol | -                          | 89                                       | -                         | 75                                      |
| propan-2-ol     | No data available          | -  | -                         | 319                                     |

DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

| Ingredient(s)   | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|-----------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| 2-butoxyethanol | 246                        | 1091                          | -                         | 98                           |
| propan-2-ol     | -                          | -                             | -                         | 500                          |

DNEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

| Ingredient(s)   | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|-----------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| 2-butoxyethanol | 147                        | 426                           | -                         | 59                           |
| propan-2-ol     | -                          | -                             | -                         | 89                           |

##### Environmental exposure

Environmental exposure - PNEC

| Ingredient(s)   | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|-----------------|-----------------------------|------------------------------|---------------------|-------------------------------|
| 2-butoxyethanol | 8.8                         | 0.88                         | 9.1                 | 463                           |
| propan-2-ol     | 140.9                       | 140.9                        | 140.9               | 2251                          |

Environmental exposure - PNEC, continued

| Ingredient(s)   | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m <sup>3</sup> ) |
|-----------------|------------------------------|--------------------------|--------------|--------------------------|
| 2-butoxyethanol | 34.6                         | 3.46                     | 2.33         | -                        |
| propan-2-ol     | 552                          | 552                      | 28           | -                        |

### 8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

|   |   |
|---|---|
| <b>Appropriate engineering controls:</b>    | Provide a good standard of general ventilation.   |
| <b>Appropriate organisational controls:</b> | Users are advised to consider national Occupational Exposure Limits or other equivalent values, if available. No special requirements under normal use conditions.            |
| <b>Personal protective equipment</b>        |   |
| <b>Eye / face protection:</b>               | Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 166).                       |
| <b>Hand protection:</b>                     | No special requirements under normal use conditions.  |
| <b>Body protection:</b>                     | No special requirements under normal use conditions.  |
| <b>Respiratory protection:</b>              | Trigger spray bottle application: No special requirements under normal use conditions. Apply technical measures to comply with the occupational exposure limits, if available |
| <b>Environmental exposure controls:</b>     | No special requirements under normal use conditions.  |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

|  |                      | Method / remark                                |
|--|----------------------|--|
| <b>Physical State:</b>                               | Liquid               |  |
| <b>Colour:</b>                                       | Clear , Pale , Green |  |
| <b>Odour:</b>  | Product specific     |  |
| <b>Odour threshold:</b>                              | Not applicable       |  |
| <b>pH</b> ≈ 8 (neat)                                 |                      | ISO 4316                                       |
| <b>Melting point/freezing point (°C):</b>            | 999                  | Not relevant to classification of this product |
| <b>Initial boiling point and boiling range (°C):</b> | Not determined       | See substance data                             |

Substance data, boiling point

| Ingredient(s)   | Value (°C) | Method           | Atmospheric pressure (hPa) |
|-----------------|------------|------------------|----------------------------|
| 2-butoxyethanol | 168-172    | Method not given | 1013                       |
| propan-2-ol     | 82         | Method not given | 1013                       |

**Flammability (liquid):** Not flammable.

**Flash point (°C):** > 35 °C

**Sustained combustion:** The product does not sustain combustion  
( UN Manual of Tests and Criteria, section 32, L.2 )

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Not applicable to liquids

**Upper/lower flammability limit (%):** Not determined

### Method / remark

Weight of evidence

Weight of evidence

Not relevant to classification of this product

See substance data

Substance data, flammability or explosive limits, if available:

| Ingredient(s)   | Lower limit (% vol) | Upper limit (% vol) |
|-----------------|---------------------|---------------------|
| 2-butoxyethanol | 1.1                 | 10.6                |
| propan-2-ol     | 2                   | 13                  |

**Vapour pressure:** Not determined

### Method / remark

See substance data

Substance data, vapour pressure

| Ingredient(s)   | Value (Pa) | Method           | Temperature (°C) |
|-----------------|------------|------------------|------------------|
| 2-butoxyethanol | 89         | Method not given | 20               |
| propan-2-ol     | 4200       | Method not given | 20               |

**Vapour density:** Not determined

**Relative density:** ≈ 1.00 (20 °C)

**Solubility in / Miscibility with Water:** Fully miscible

### Method / remark

Not relevant to classification of this product

OECD 109 (EU A.3)

Substance data, solubility in water

| Ingredient(s)   | Value (g/l) | Method           | Temperature (°C) |
|-----------------|-------------|------------------|------------------|
| 2-butoxyethanol | Soluble     | Method not given | 20               |
| propan-2-ol     | Soluble     | Method not given |                  |

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

#### Method / remark

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not applicable.

**Viscosity:** Not determined

**Explosive properties:** Not explosive. Vapours may form explosive mixtures with air.

**Oxidising properties:** Not oxidising.

#### 9.2 Other information

**Surface tension (N/m):** Not determined

Not relevant to classification of this product

**Corrosion to metals:** Not corrosive

Substance data, dissociation constant, if available:

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

#### 10.2 Chemical stability

Stable under normal storage and use conditions.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

#### 10.4 Conditions to avoid

None known under normal storage and use conditions.

#### 10.5 Incompatible materials

None known under normal use conditions.

#### 10.6 Hazardous decomposition products

None known under normal storage and use conditions.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Mixture data:.

#### Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

ATE - Dermal (mg/kg): >2000

ATE - Inhalatory, vapours (mg/l): >20

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Substance data, where relevant and available, are listed below:.

#### Acute toxicity

Acute oral toxicity

| Ingredient(s)   | Endpoint         | Value (mg/kg) | Species | Method           | Exposure time (h) | ATE (mg/kg) |
|-----------------|------------------|---------------|---------|------------------|-------------------|-------------|
| 2-butoxyethanol | LD <sub>50</sub> | 1746          | Rat     | Method not given |                   | 1746        |
| propan-2-ol     | LD <sub>50</sub> | 3570          | Rat     | Method not given |                   | 3570        |

Acute dermal toxicity

| Ingredient(s)   | Endpoint         | Value (mg/kg) | Species | Method           | Exposure time (h) | ATE (mg/kg)     |
|-----------------|------------------|---------------|---------|------------------|-------------------|-----------------|
| 2-butoxyethanol | LD <sub>50</sub> | 6411          |         | Method not given |                   | 1100            |
| propan-2-ol     | LD <sub>50</sub> | > 2000        | Rabbit  | Method not given |                   | Not established |

Acute inhalative toxicity

| Ingredient(s)   | Endpoint         | Value (mg/l)                     | Species | Method           | Exposure time (h) |
|-----------------|------------------|----------------------------------|---------|------------------|-------------------|
| 2-butoxyethanol | LC <sub>50</sub> | > 2 (mist) No mortality observed | Rat     | Method not given | 4                 |

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| propan-2-ol | LC <sub>50</sub> | > 25 (vapour) | Rat | OECD 403 (EU B.2) | 6 |
|-------------|------------------|---------------|-----|-------------------|---|

Acute inhalative toxicity, continued

| Ingredient(s)   | ATE - inhalation, dust (mg/l) | ATE - inhalation, mist (mg/l) | ATE - inhalation, vapour (mg/l) | ATE - inhalation, gas (mg/l) |
|-----------------|-------------------------------|-------------------------------|---------------------------------|------------------------------|
| 2-butoxyethanol | -                             | 1.5                           | -                               | -                            |
| propan-2-ol     | -                             | -                             | 25                              | -                            |

**Irritation and corrosivity**

Skin irritation and corrosivity

| Ingredient(s)   | Result       | Species | Method            | Exposure time      |
|-----------------|--------------|---------|-------------------|--------------------|
| 2-butoxyethanol | Irritant     | Rabbit  | OECD 404 (EU B.4) | 24; 48; 72 hour(s) |
| propan-2-ol     | Not irritant | Rabbit  | OECD 404 (EU B.4) |                    |

Eye irritation and corrosivity

| Ingredient(s)   | Result   | Species | Method            | Exposure time      |
|-----------------|----------|---------|-------------------|--------------------|
| 2-butoxyethanol | Irritant | Rabbit  | OECD 405 (EU B.5) | 24; 48; 72 hour(s) |
| propan-2-ol     | Irritant | Rabbit  | OECD 405 (EU B.5) |                    |

Respiratory tract irritation and corrosivity

| Ingredient(s)   | Result            | Species | Method | Exposure time |
|-----------------|-------------------|---------|--------|---------------|
| 2-butoxyethanol | No data available |         |        |               |
| propan-2-ol     | No data available |         |        |               |

**Sensitisation**

Sensitisation by skin contact

| Ingredient(s)   | Result          | Species    | Method                           | Exposure time (h) |
|-----------------|-----------------|------------|----------------------------------|-------------------|
| 2-butoxyethanol | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT         |                   |
| propan-2-ol     | Not sensitising | Guinea pig | OECD 406 (EU B.6) / Buehler test |                   |

Sensitisation by inhalation

| Ingredient(s)   | Result            | Species | Method | Exposure time |
|-----------------|-------------------|---------|--------|---------------|
| 2-butoxyethanol | No data available |         |        |               |
| propan-2-ol     | No data available |         |        |               |

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Mutagenicity

| Ingredient(s)   | Result (in-vitro)  | Method (in-vitro)                                      | Result (in-vivo)                                    | Method (in-vivo)   |
|-----------------|--|--|---|--------------------|
| 2-butoxyethanol | No evidence for mutagenicity, negative test results  | OECD 471 (EU B.12/13) OECD 476 (Chinese Hamster Ovary) | No evidence for mutagenicity, negative test results | OECD 474 (EU B.12) |
| propan-2-ol     | No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results | OECD 471 (EU B.12/13)                                  | No evidence of genotoxicity, negative test results  | OECD 474 (EU B.12) |

Carcinogenicity

| Ingredient(s)   | Effect   |
|-----------------|--|
| 2-butoxyethanol | No evidence for carcinogenicity, negative test results |
| propan-2-ol     | No evidence for carcinogenicity, negative test results |

Toxicity for reproduction

| Ingredient(s)   | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|-----------------|----------|-----------------|--------------------|---------|--------|---------------|------------------------------------|
| 2-butoxyethanol |          |                 | No data available  |         |        |               |                                    |
| propan-2-ol     |          |                 | No data available  |         |        |               |                                    |

**Repeated dose toxicity**

Sub-acute or sub-chronic oral toxicity

| Ingredient(s)   | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|-----------------|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| 2-butoxyethanol |          | No data available  |         |        |                      |                                      |
| propan-2-ol     |          | No data available  |         |        |                      |                                      |

## Sub-chronic dermal toxicity

| Ingredient(s)   | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|-----------------|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| 2-butoxyethanol |          | No data available  |         |        |                      |                                      |
| propan-2-ol     |          | No data available  |         |        |                      |                                      |

## Sub-chronic inhalation toxicity

| Ingredient(s)   | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|-----------------|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| 2-butoxyethanol |          | No data available  |         |        |                      |                                      |
| propan-2-ol     |          | No data available  |         |        |                      |                                      |

## Chronic toxicity

| Ingredient(s)   | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|-----------------|----------------|----------|--------------------|---------|--------|---------------|--------------------------------------|--------|
| 2-butoxyethanol |                |          | No data available  |         |        |               |                                      |        |
| propan-2-ol     |                |          | No data available  |         |        |               |                                      |        |

## STOT-single exposure

| Ingredient(s)   | Affected organ(s)      |
|-----------------|------------------------|
| 2-butoxyethanol | No data available      |
| propan-2-ol     | Central nervous system |

## STOT-repeated exposure

| Ingredient(s)   | Affected organ(s)      |
|-----------------|------------------------|
| 2-butoxyethanol | No data available      |
| propan-2-ol     | Central nervous system |

## Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

## Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

## SECTION 12: Ecological information

### 12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

#### Aquatic short-term toxicity

Aquatic short-term toxicity - fish

| Ingredient(s)   | Endpoint         | Value (mg/l) | Species                    | Method           | Exposure time (h) |
|-----------------|------------------|--------------|----------------------------|------------------|-------------------|
| 2-butoxyethanol | LC <sub>50</sub> | > 100        | <i>Oncorhynchus mykiss</i> | OECD 203, static | 96                |
| propan-2-ol     | LC <sub>50</sub> | > 100        | <i>Pimephales promelas</i> | Method not given | 48                |

Aquatic short-term toxicity - crustacea

| Ingredient(s)   | Endpoint         | Value (mg/l) | Species                     | Method           | Exposure time (h) |
|-----------------|------------------|--------------|-----------------------------|------------------|-------------------|
| 2-butoxyethanol | EC <sub>50</sub> | > 100        | <i>Daphnia magna Straus</i> | OECD 202, static | 48                |
| propan-2-ol     | EC <sub>50</sub> | > 100        | <i>Daphnia magna Straus</i> | Method not given | 48                |

Aquatic short-term toxicity - algae

| Ingredient(s)   | Endpoint         | Value (mg/l) | Species                                | Method           | Exposure time (h) |
|-----------------|------------------|--------------|--|------------------|-------------------|
| 2-butoxyethanol | EC <sub>50</sub> | > 100        | <i>Pseudokirchneriella subcapitata</i> | OECD 201, static | 72                |

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| propan-2-ol | EC <sub>50</sub> | > 100 | <i>Scenedesmus quadricauda</i> | Method not given | 72 |
|-------------|------------------|-------|--------------------------------|------------------|----|

**Aquatic short-term toxicity - marine species**

| Ingredient(s)   | Endpoint | Value (mg/l)      | Species | Method | Exposure time (days) |
|-----------------|----------|-------------------|---------|--------|----------------------|
| 2-butoxyethanol |          | No data available |         |        | -                    |
| propan-2-ol     |          | No data available |         |        | -                    |

**Impact on sewage plants - toxicity to bacteria**

| Ingredient(s)   | Endpoint         | Value (mg/l) | Inoculum                  | Method           | Exposure time |
|-----------------|------------------|--------------|---------------------------|------------------|---------------|
| 2-butoxyethanol | EC <sub>0</sub>  | 700          | <i>Pseudomonas putida</i> | Method not given | 16 hour(s)    |
| propan-2-ol     | EC <sub>50</sub> | > 1000       | <i>Activated sludge</i>   | Method not given |               |

**Aquatic long-term toxicity**

**Aquatic long-term toxicity - fish**

| Ingredient(s)   | Endpoint | Value (mg/l)      | Species            | Method   | Exposure time | Effects observed |
|-----------------|----------|-------------------|--------------------|----------|---------------|------------------|
| 2-butoxyethanol | NOEC     | > 100             | <i>Danio rerio</i> | OECD 204 | 21 day(s)     |                  |
| propan-2-ol     |          | No data available |                    |          |               |                  |

**Aquatic long-term toxicity - crustacea**

| Ingredient(s)   | Endpoint | Value (mg/l)      | Species              | Method   | Exposure time | Effects observed |
|-----------------|----------|-------------------|----------------------|----------|---------------|------------------|
| 2-butoxyethanol | NOEC     | 100               | <i>Daphnia magna</i> | OECD 211 | 21 day(s)     |                  |
| propan-2-ol     |          | No data available |                      |          |               |                  |

**Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:**

| Ingredient(s)   | Endpoint | Value (mg/kg dw sediment) | Species | Method | Exposure time (days) | Effects observed |
|-----------------|----------|---------------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol |          | No data available         |         |        | -                    |                  |
| propan-2-ol     |          | No data available         |         |        | -                    |                  |

**Terrestrial toxicity**

**Terrestrial toxicity - soil invertebrates, including earthworms, if available:**

| Ingredient(s)   | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|-----------------|----------|-----------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol |          | No data available     |         |        | -                    |                  |
| propan-2-ol     |          | No data available     |         |        | -                    |                  |

**Terrestrial toxicity - plants, if available:**

| Ingredient(s)   | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|-----------------|----------|-----------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol |          | No data available     |         |        | -                    |                  |
| propan-2-ol     |          | No data available     |         |        | -                    |                  |

**Terrestrial toxicity - birds, if available:**

| Ingredient(s)   | Endpoint | Value             | Species | Method | Exposure time (days) | Effects observed |
|-----------------|----------|-------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol |          | No data available |         |        | -                    |                  |
| propan-2-ol     |          | No data available |         |        | -                    |                  |

**Terrestrial toxicity - beneficial insects, if available:**

| Ingredient(s)   | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|-----------------|----------|-----------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol |          | No data available     |         |        | -                    |                  |
| propan-2-ol     |          | No data available     |         |        | -                    |                  |

|                 |  |                   |  |  |   |  |
|-----------------|--|-------------------|--|--|---|--|
| 2-butoxyethanol |  | No data available |  |  | - |  |
| propan-2-ol     |  | No data available |  |  | - |  |

Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s)   | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
|-----------------|----------|-----------------------|---------|--------|----------------------|------------------|
| 2-butoxyethanol |          | No data available     |         |        | -                    |                  |
| propan-2-ol     |          | No data available     |         |        | -                    |                  |

**12.2 Persistence and degradability****Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

| Ingredient(s)   | Inoculum | Analytical method          | DT <sub>50</sub>    | Method    | Evaluation            |
|-----------------|----------|----------------------------|---------------------|-----------|-----------------------|
| 2-butoxyethanol |          | CO <sub>2</sub> production | 90.4 % in 28 day(s) | OECD 301B | Readily biodegradable |
| propan-2-ol     |          |                            | 95 % in 21 day(s)   | OECD 301E | Readily biodegradable |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

**12.3 Bioaccumulative potential**Partition coefficient n-octanol/water (log K<sub>ow</sub>)

| Ingredient(s)   | Value | Method   | Evaluation                        | Remark |
|-----------------|-------|----------|-----------------------------------|--------|
| 2-butoxyethanol | 0.81  | OECD 107 | Low potential for bioaccumulation |        |
| propan-2-ol     | 0.05  | OECD 107 | No bioaccumulation expected       |        |

Bioconcentration factor (BCF)

| Ingredient(s)   | Value             | Species | Method | Evaluation | Remark |
|-----------------|-------------------|---------|--------|------------|--------|
| 2-butoxyethanol | No data available |         |        |            |        |
| propan-2-ol     | No data available |         |        |            |        |

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

| Ingredient(s)   | Adsorption coefficient Log K <sub>oc</sub> | Desorption coefficient Log K <sub>oc(des)</sub> | Method | Soil/sediment type | Evaluation                                       |
|-----------------|--|---|--------|--------------------|--|
| 2-butoxyethanol | No data available                          |   |        |                    | Potential for mobility in soil, soluble in water |
| propan-2-ol     | No data available                          |   |        |                    | Potential for mobility in soil, soluble in water |

**12.5 Results of PBT and vPvB assessment**

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

**12.6 Other adverse effects**

No other adverse effects known.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Waste from residues / unused products:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

**European Waste Catalogue:**

20 01 30 - detergents other than those mentioned in 20 01 29.

**Empty packaging**

**Recommendation:** Dispose of observing national or local regulations.  
**Suitable cleaning agents:** Water, if necessary with cleaning agent.

## SECTION 14: Transport information

### Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

- 14.1 UN number: Non-dangerous goods
- 14.2 UN proper shipping name: Non-dangerous goods
- 14.3 Transport hazard class(es): Non-dangerous goods
- 14.4 Packing group: Non-dangerous goods
- 14.5 Environmental hazards: Non-dangerous goods
- 14.6 Special precautions for user: Non-dangerous goods
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

## SECTION 15: Regulatory information

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

#### **EU regulations:**

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation

**Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII):** Not applicable.

UFI: 8EKG-01WS-J00T-KR86

#### **Ingredients according to EC Detergents Regulation 648/2004**

2-Bromo-2-Nitropropane-1,3-Diol

**Seveso - Classification:** Not classified

### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

## SECTION 16: Other information

*The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract*

**SDS code:** MS1005072

**Version:** 01.0

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#### **Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

#### **Full text of the H and EUH phrases mentioned in section 3:**

- H225 - Highly flammable liquid and vapour.
- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H332 - Harmful if inhaled.
- H336 - May cause drowsiness or dizziness.

#### **Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic

**ZENITH 6E GLASS & STAINLESS STEEL CLEANER**

- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- OECD - Organization for Economic Cooperation and Development

**End of Safety Data Sheet**