

**ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT**

Revision: 2022-01-16

Version: 01.1

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

**1.1 Product identifier**

**Trade name:** ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT

UFI: 6K3E-115G-E00W-J6QF

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

**Product use:** Dish wash product.  
Glass cleaner.  
For professional use only.

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

**SWED - Sector-specific worker exposure description :**

AISE\_SWED\_PW\_4\_2  
AISE\_SWED\_PW\_8b\_1  
AISE\_SWED\_PW\_1\_1  
AISE\_SWED\_PW\_4\_1

**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  
customer-care-zenith@diversey.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**

Skin Irrit. 2 (H315)  
Eye Irrit. 2 (H319)  
Met. Corr. 1 (H290)

**2.2 Label elements**



**Signal word:** Warning.

**Hazard statements:**

H290 - May be corrosive to metals.  
H315 + H319 - Causes skin and serious eye irritation.

**2.3 Other hazards**

No other hazards known.

## ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT

**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Specific concentration limits**

sodium hydroxide:

- Eye Dam. 1 (H318) >= 3% > Eye Irrit. 2 (H319) >= 0.5%
- Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

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

ATE, if available, are listed in section 11.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

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

**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>	Take off immediately all contaminated clothing and wash it before reuse.
<b>Eye contact:</b>	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or 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>	Causes irritation.
<b>Eye contact:</b>	Causes severe irritation.
<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**

Repeated or prolonged contact:.

**6.2 Environmental precautions**

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

**ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT**

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. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

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

Store in accordance with local and national regulations. Store in a closed container. 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:

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/DMEL oral exposure - Consumer (mg/kg bw)

DNEL/DMEL dermal exposure - Worker

DNEL/DMEL dermal exposure - Consumer

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

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

**Environmental exposure**

Environmental exposure - PNEC

Environmental exposure - PNEC, continued

**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:*

**Appropriate engineering controls:** No special requirements under normal use conditions.  
**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

**REACH use scenarios considered for the undiluted product:**

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated system	AISE_SWED_PW_4_2	PW	PROC 4	480	ERC8a
Automatic transfer and dilution	AISE_SWED_PW_8b_1	PW	PROC 8b	60	ERC8b

**Personal protective equipment****Eye / face protection:**

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 166).

**Hand protection:**

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary. Repeated or prolonged contact: Chemical-resistant protective gloves (EN 374). Verify instructions

## ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT

regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time:  $\geq 480$  min Material thickness:  $\geq 0.7$  mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time:  $\geq 30$  min Material thickness:  $\geq 0.4$  mm

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

**Body protection:** No special requirements under normal use conditions.

**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** Should not reach sewage water or drainage ditch undiluted or unneutralised.

*Recommended safety measures for handling the diluted product:*

**Recommended maximum concentration (% w/w):** 0.4

**Appropriate engineering controls:** No special requirements under normal use conditions.

**Appropriate organisational controls:** No special requirements under normal use conditions.

**REACH use scenarios considered for the diluted product:**

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

**Personal protective equipment**

**Eye / face protection:** No special requirements under normal use conditions.

**Hand protection:** No special requirements under normal use conditions.

**Body protection:** No special requirements under normal use conditions.

**Respiratory protection:** No special requirements under normal use conditions.

**Environmental exposure controls:** 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

**Physical state:** Liquid

**Colour:** Clear , Colourless

**Odour:** Product specific

**Odour threshold:** Not applicable

**Melting point/freezing point (°C):** Not determined

**Initial boiling point and boiling range (°C):** Not determined

**Method / remark**

Not relevant to classification of this product  
See substance data

Substance data, boiling point

**Method / remark**

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

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

**Flash point (°C):** Not applicable.

**Sustained combustion:** Not applicable.

( UN Manual of Tests and Criteria, section 32, L.2 )

**Lower and upper explosion limit/flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not applicable.

**pH:**  $\geq 11.5$  (neat)

**Dilution pH:**  $\approx 8$  (0.4 %)

**Kinematic viscosity:** Not determined

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

ISO 4316

ISO 4316

Substance data, solubility in water

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

## ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT

**Vapour pressure:** Not determined

Substance data, vapour pressure

**Method / remark**  
See substance data

**Relative density:**  $\approx 1.04$  (20 °C)

**Relative vapour density:** No data available.

**Particle characteristics:** No data available.

**Method / remark**  
OECD 109 (EU A.3)  
Not relevant to classification of this product  
Not applicable to liquids.

## 9.2 Other information

### 9.2.1 Information with regard to physical hazard classes

**Explosive properties:** Not explosive.

**Oxidising properties:** Not oxidising.

**Corrosion to metals:** Corrosive

Weight of evidence

### 9.2.2 Other safety characteristics

No other relevant information 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

May be corrosive to metals.

### 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

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

#### Acute toxicity

Acute oral toxicity

Acute dermal toxicity

Acute inhalative toxicity

Acute inhalative toxicity, continued

#### Irritation and corrosivity

Skin irritation and corrosivity

Eye irritation and corrosivity

Respiratory tract irritation and corrosivity

**Sensitisation**

Sensitisation by skin contact

Sensitisation by inhalation

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

Mutagenicity

Carcinogenicity

Toxicity for reproduction

**Repeated dose toxicity**

Sub-acute or sub-chronic oral toxicity

Sub-chronic dermal toxicity

Sub-chronic inhalation toxicity

Chronic toxicity

STOT-single exposure

STOT-repeated exposure

**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.

**11.2 Information on other hazards****11.2.1 Endocrine disrupting properties**

Endocrine disrupting properties - Human data, if available:

**11.2.2 Other information**

No other relevant information available.

**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

Aquatic short-term toxicity - crustacea

Aquatic short-term toxicity - algae

Aquatic short-term toxicity - marine species

Impact on sewage plants - toxicity to bacteria

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

Aquatic long-term toxicity - crustacea

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

**ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT****Terrestrial toxicity**

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if 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

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 Kow)

Bioconcentration factor (BCF)

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

**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 Endocrine disrupting properties**

Endocrine disrupting properties - Environmental effects, if available:

**12.7 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 15\* - alkalines.

**Empty packaging****Recommendation:**

Dispose of observing national or local regulations.

**Suitable cleaning agents:**

Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

## ZENITH 1P CONCENTRATED GLASS MACHINE DETERGENT

**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)****14.1 UN number:** 1824**14.2 UN proper shipping name:**

Sodium hydroxide solution

**14.3 Transport hazard class(es):**

Transport hazard class (and subsidiary risks): 8

**14.4 Packing group:** III**14.5 Environmental hazards:**

Environmentally hazardous: No

Marine pollutant: No

**14.6 Special precautions for user:** None known.**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** The product is not transported in bulk tankers.**Other relevant information:****ADR**

Classification code: C5

Tunnel restriction code: E

Hazard identification number: 80

**IMO/IMDG**

EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations :**

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Regulation (EC) 648/2004 - Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

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

phosphonates

&lt; 5 %

**Comah - 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:** MS1004889**Version:** 01.1**Revision:** 2022-01-16**Reason for revision:**

This data sheet contains changes from the previous version in section(s):, 1, 8, 16, Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006

**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:**

- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.



**Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organization for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

**End of Safety Data Sheet**