



## Zenith 2B Machine Rinse Aid

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 2B Machine Rinse Aid

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

**Identified uses:**

For professional use only.

AISE-P204 - Rinse aid. Automatic 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

#### 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

The product contains no substances classified as hazardous in concentrations which should be taken into account.

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
-	-	-	-	Not classified as hazardous		-

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

**Inhalation:**

Get medical attention or advice if you feel unwell.

**Skin contact:**

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

**Eye contact:**

Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.

**Ingestion:**

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.

**Zenith 2B Machine Rinse Aid**

**Self-protection of first aider:** Consider personal protective equipment as indicated in subsection 8.2.

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

**Inhalation:** No known effects or symptoms in normal use.  
**Skin contact:** No known effects or symptoms in normal use.  
**Eye contact:** No known effects or symptoms in normal use.  
**Ingestion:** 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. 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:

Biological limit values, if available:

**Recommended monitoring procedures, if available:**

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

## Zenith 2B Machine Rinse Aid

## 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
-	No data available	No data available	No data available	No data available

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)
-	No data available	No data available	No data available	No data available

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)
-	No data available	No data available	No data available	No data available

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
-	No data available	No data available	No data available	No data available

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
-	No data available	No data available	No data available	No data available

## 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)
-	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
-	No data available	No data available	No data available	No data available

## 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:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

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

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

## 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:** 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.

Recommended safety measures for handling the diluted product:

**Recommended maximum concentration (% w/w):** 0.05

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

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

## 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

## Zenith 2B Machine Rinse Aid

**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 , Blue

**Odour:** Product specific

**Odour threshold:** Not applicable

**pH** ≈ 7 (neat)

**Dilution pH:** ≈ 7 (0.05 %)

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

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

#### Method / remark

ISO 4316

ISO 4316

Not relevant to classification of this product

See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
-	No data available		

#### Method / remark

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

**Flash point (°C):** Not applicable.

**Sustained combustion:** Not applicable.

( 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

Substance data, flammability or explosive limits, if available:

#### Method / remark

**Vapour pressure:** Not determined

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
-	No data available		

#### Method / remark

**Vapour density:** Not determined

**Relative density:** ≈ 1.00 (20 °C)

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

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)
-	No data available		

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

#### Method / remark

**Autoignition temperature:** 99

**Decomposition temperature:** Not applicable.

**Viscosity:** Not determined

**Explosive properties:** Not explosive.

**Oxidising properties:** Not oxidising.

### 9.2 Other information

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

**Corrosion to metals:** Not corrosive

Not relevant to classification of this product

Weight of evidence

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

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)
-		No data available				Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
-		No data available				Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
-		No data available			

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)
-	Not established	Not established	Not established	Not established

#### Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
-	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
-	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
-	No data available			

#### Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
-	No data available			

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
-	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)
-	No data available		No data available	

## Carcinogenicity

Ingredient(s)	Effect
-	No data available

## Toxicity for reproduction

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

## STOT-single exposure

Ingredient(s)	Affected organ(s)
-	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
-	No data available

**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)
-		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
-		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
-		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
-		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
-		No data available			

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
-		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
-		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
-		No data available				

**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:

## Zenith 2B Machine Rinse Aid

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
-					No data available

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)

Ingredient(s)	Value	Method	Evaluation	Remark
-	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
-	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
-	No data available				

**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



**Zenith 2B Machine Rinse Aid**

- 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: J0UD-E14S-T00E-D2F0

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

non-ionic surfactants, anionic surfactants < 5 %  
2-Bromo-2-Nitropropane-1,3-Diol

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

**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:** MS1004861

**Version:** 01.0

**Revision:** 2020-12-14

**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.

**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
- 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**