



SAFETY DATA SHEET DWG2 GLASS RINSE

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name DWG2 GLASS RINSE

Internal identification C858

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

Identified uses Machine rinse additive for glassware

Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS
RAWDON ROAD,
MOIRA,
SWADLINCOTE,
DERBYSHIRE,
DE12 6DA,
ENGLAND
TEL: +44 (0)1283 221044
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H319 Causes serious eye irritation.

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Precautionary statements	P280 Wear protective gloves, eye and face protection.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313 If eye irritation persists: Get medical advice/ attention.
	P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SODIUM (XYLENES AND 4-ETHYLBENZENE SULFONATE)			1-5%
CAS number: —	EC number: 701-037-1	REACH registration number: 01-2119513350-56-xxxx	
Classification Eye Irrit. 2 - H319			
CITRIC ACID ANHYDROUS			1-5%
CAS number: 77-92-9	EC number: 201-069-1	REACH registration number: 01-2119457002-64-XXXX	
Classification Eye Irrit. 2 - H319			
FATTY ALCOHOL ALKOXYLATE			1-5%
CAS number: —			
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	If medical advice is needed, have product container or label at hand. Show this Safety Data Sheet to the medical personnel. Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Wash skin thoroughly with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse. Get medical attention if any discomfort continues.

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

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Inhalation	Coughing, chest tightness, feeling of chest pressure.
Ingestion	Gastrointestinal symptoms, including upset stomach.
Skin contact	Product has a defatting effect on skin.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.
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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO ₂). Sulphurous gases (SO _x).
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5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Take care as floors and other surfaces may become slippery. Avoid contact with skin, eyes and clothing. Do not touch or walk into spilled material. Provide adequate ventilation. Avoid contact with contaminated tools and objects. Do not handle broken packages without protective equipment. Wash thoroughly after dealing with a spillage.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Wear protective gloves, eye and face protection. Avoid contact with skin, eyes and clothing. Avoid release to the environment. Provide adequate ventilation. Do not empty into drains. Do not eat, drink or smoke when using this product. Do not reuse empty containers. Avoid contact with contaminated tools and objects. Do not handle broken packages without protective equipment. Wash hands thoroughly after handling.
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7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions Store at temperatures between 4°C and 40°C.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

CITRIC ACID ANHYDROUS

Short-term exposure limit (15-minute): WEL 10 mg/m³ dust only

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ dust only

WEL = Workplace Exposure Limit.

SODIUM (XYLENES AND 4-ETHYLBENZENE SULFONATE)

DNEL

Workers - Inhalation; Long term systemic effects: 26.9 mg/m³
 Workers - Dermal; Long term systemic effects: 136.25 mg/kg/day
 Workers - Dermal; Long term local effects: 0.096 mg/cm²
 Consumer - Inhalation; Long term systemic effects: 6.6 mg/m³
 Consumer - Dermal; Long term systemic effects: 68.1 mg/kg
 Consumer - Dermal; Long term local effects: 0.048 mg/cm²
 Consumer - Oral; Long term systemic effects: 3.8 mg/kg/day

PNEC

Fresh water; 0.23 mg/l
 marine water; 0.023 mg/l
 Intermittent release; 2.3 mg/l
 Sediment (Freshwater); 0.862 mg/kg
 Sediment (Marinewater); 0.0862 mg/kg
 Soil; 0.037 mg/kg
 STP; 100 mg/l

CITRIC ACID ANHYDROUS (CAS: 77-92-9)

PNEC

- Fresh water; 0.44 mg/l
 - marine water; 0.044 mg/l
 - Sediment (Freshwater); 7.52 mg/kg
 - Sediment (Marinewater); 0.752 mg/kg
 - Soil; 29.2 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. The following protection should be worn: Tight-fitting safety glasses.

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Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. When used with mixtures, the protection time of gloves cannot be accurately estimated. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Protective gloves should have a minimum thickness of 0.15 mm. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Rubber (natural, latex). Neoprene.

Other skin and body protection

Provide eyewash station.

Hygiene measures

Wash hands after handling.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Blue.
Odour	Slight.
Odour threshold	Not determined.
pH	pH (concentrated solution): >2.0
Melting point	Not applicable.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not applicable.
Vapour pressure	Not determined.
Relative density	~ 1.03 @ 25°C
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not applicable.
Viscosity	Not determined.

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Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2. Other information

Other information	Not determined.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not determined.
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10.4. Conditions to avoid

Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
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10.5. Incompatible materials

Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO ₂). Sulphurous gases (SO _x).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
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ATE oral (mg/kg)	13,681.82
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Acute toxicity - dermal

Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
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Acute toxicity - inhalation

Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
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Skin corrosion/irritation

Skin corrosion/irritation	Based on available data the classification criteria are not met.
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Extreme pH	Moderate pH (> 2 and < 11.5).
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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.
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Respiratory sensitisation

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Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vivo	Does not contain any substances known to be mutagenic.
<u>Carcinogenicity</u>	
Carcinogenicity	Does not contain any substances known to be carcinogenic.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Does not contain any substances known to be toxic to reproduction.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
<u>Inhalation</u>	
Inhalation	Coughing, chest tightness, feeling of chest pressure.
<u>Ingestion</u>	
Ingestion	Gastrointestinal symptoms, including upset stomach.
<u>Skin contact</u>	
Skin contact	Product has a defatting effect on skin.
<u>Eye contact</u>	
Eye contact	Causes serious eye irritation.
<u>Acute and chronic health hazards</u>	
Acute and chronic health hazards	Irritating to eyes.
<u>Route of exposure</u>	
Route of exposure	Skin and/or eye contact
<u>Target organs</u>	
Target organs	Eyes
<u>Medical symptoms</u>	
Medical symptoms	Irritation of eyes and mucous membranes.

Toxicological information on ingredients.

SODIUM (XYLENES AND 4-ETHYLBENZENE SULFONATE)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ 7,200.0
mg/kg)

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.0
mg/kg)

Species Rabbit

CITRIC ACID ANHYDROUS

Acute toxicity - oral

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Acute toxicity oral (LD₅₀ 5,400.0
mg/kg)

Species Mouse

ATE oral (mg/kg) 5,400.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,001.0
mg/kg)

Species Rat

ATE dermal (mg/kg) 2,001.0

FATTY ALCOHOL ALKOXYLATEAcute toxicity - oral

Acute toxicity oral (LD₅₀ 301.0
mg/kg)

Species Rat

ATE oral (mg/kg) 301.0

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. ToxicityAcute aquatic toxicity

Acute toxicity - fish Not determined.

Ecological information on ingredients.SODIUM (XYLENES AND 4-ETHYLBENZENE SULFONATE)Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >1000 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >1000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: >230 mg/l, Selenastrum capricornutum

CITRIC ACID ANHYDROUSAcute aquatic toxicity

Acute toxicity - fish LC₅₀, 48 hours: 440 mg/l,
LC₅₀, 96 hours: 440 - 706 mg/l, Fish

FATTY ALCOHOL ALKOXYLATEAcute aquatic toxicity

Acute toxicity - fish LC₅₀, 48 hours: 1-10 mg/l,

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1-10 mg/l, Daphnia magna

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12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Special Provisions note

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

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SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. UN: United Nations. vPvB: Very Persistent and Very Bioaccumulative.
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Classification abbreviations and acronyms	Eye Irrit. = Eye irritation Skin Irrit. = Skin irritation Acute Tox. = Acute toxicity
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Classification procedures according to Regulation (EC) 1272/2008	Eye Irrit. 2 - H319: Calculation method.
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Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	09/03/2021
Revision	6.0
Supersedes date	16/02/2017
SDS number	18692
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.

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This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.