

# Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 14.06.2022

Version number 1

Revision Date 17.02.2022

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

- **1.1 Product identifier**
- **Trade name: AF300 Antifadent solution**
- **Article number:** AGR1328-3
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
A glycerol-amine solution for use in fluorescence microscopy.
- **Application of the substance / the preparation:** No further relevant information.
- **Uses advised against** Any use other than those identified.
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier.**  
Agar Scientific Ltd  
Parsonage Lane  
Stansted CM24 8GF  
United Kingdom  
sales@agarscientific.com  
Tel: +44 (0) 1279 813 519
- **Further information obtainable from:** Technical Support
- **1.4 Emergency telephone number:** 24 hours: +44 (0)1856 407333

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
triethylenediamine
- **Hazard statements**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.
- **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P264	Wash thoroughly after handling.
P280	Wear protective gloves / eye protection / 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.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P337+P313	If eye irritation persists: Get medical advice/attention.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 56-81-5	glycerol	95.0%
EINECS: 200-289-5	substance with a Community workplace exposure limit	
CAS: 280-57-9	triethylenediamine	5.0%
EINECS: 205-999-9	⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302	

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
No adverse effects are anticipated from inhalation.  
If unconscious, place the patient on their side in the recovery position and ensure they are breathing. Clean nose and mouth with water. Artificial respiration may be administered by suitably qualified first-aiders if the patient is unconscious or breathing is difficult. Get immediate medical attention..
- **After skin contact:**  
Wash with water and soap and rinse thoroughly.  
Remove affected person from source of contamination. Remove contaminated clothing and shoes. Wash the skin immediately with soap and water. Take especial care to clean folds, crevices, crease and groin. Get medical attention if irritation persists or develops.
- **After eye contact:**  
Rinse opened eye under running water. If symptoms persist, consult a doctor.  
Promptly rinse eyes with plenty of clean water while lifting the eyelids. Continue to rinse for at least 15 minutes. Continue until the eyes are free of all traces of contamination. Get medical attention if any discomfort or irritation persists.
- **After swallowing:**  
If swallowed do NOT induce vomiting. Never give anything by mouth to an unconscious person. If person vomits, keep head low to prevent vomit entering the lungs. Rinse mouth thoroughly. Get medical attention if symptoms persist. Keep patient at rest.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire extinguishing methods suitable to surrounding conditions.  
Extinguish with foam, carbon dioxide, dry powder or water fog
- **For safety reasons unsuitable extinguishing agents:**  
Do not use a water jet as this may spread the fire

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- **5.2 Special hazards arising from the substance or mixture**  
If heated, vapours/gases hazardous to health (e.g. CO, NOx, isocyanates) may be formed.  
In case of fire, toxic and corrosive gases may form.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self contained breathing apparatus and full protective clothing. Keep all unnecessary people away. fire water run-off must not be allowed to contaminate ground or enter drains, sewers or water courses. Provide bunding against fire water run-off.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
In case of spills, beware of slippery floors and surfaces.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.  
Cover all drains and sewers. Avoid spreading spilled material.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers.  
Flush with plenty of water to clean spillage area. Flushings must not be allowed to contaminate ground or enter drains, sewers or water courses.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.  
Use in a well ventilated area.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Avoid spilling, skin and eye contact. Wash thoroughly after handling.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**  
Store in tightly closed container in a dry and cool place. Keep away from food, drink and animal feeding stuffs. Do not store with strong acids.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:**  
Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of vapours.

· <b>Ingredients with limit values that require monitoring at the workplace:</b>
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<b>56-81-5 glycerol</b>
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WEL	Long-term value: 10 mg/m <sup>3</sup>
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- **Additional information:** The lists valid during the making were used as basis.

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- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes and skin.  
**DO NOT SMOKE IN WORK AREA!** Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
- **Respiratory protection:**  
 In case of inadequate ventilation or when the product is heated use suitable respiratory equipment with gas filter (type A2).
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Wear suitable protective gloves conforming to EN 374. Seek recommendation from manufacturer or supplier. After using gloves the hands should be washed and dried thoroughly and a suitable moisturiser applied.

- **Material of gloves**  
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

Use approved safety goggles or face shield.

- **Body protection:** Wear appropriate clothing to prevent any possibility of skin contact.

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Colourless
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.
- |                  |                 |
|------------------|-----------------|
| <b>pH-value:</b> | Not determined. |
|------------------|-----------------|

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· <b>Change in condition</b> Melting point/freezing point: 18.2 °C Initial boiling point and boiling range: >100 °C	
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Ignition temperature:</b>	400 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b> Lower: Upper:	Not determined. Not determined.
· <b>Vapour pressure at 20 °C:</b>	<0.1 hPa
· <b>Density at 20 °C:</b> · <b>Relative density</b> · <b>Vapour density</b> · <b>Evaporation rate</b>	1.26 g/cm <sup>3</sup> Not determined. Not determined. Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b> Dynamic: Kinematic:	Not determined. Not determined.
· <b>Solvent content:</b> Organic solvents: VOC (EC)	95.0 % 0.00 %
· <b>Solids content:</b>	0.0 %
· <b>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable under normal conditions of storage and use.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Avoid exposure to heat in any form including sunlight
- **10.5 Incompatible materials:** Strong oxidising agents and acids
- **10.6 Hazardous decomposition products:**  
Decomposition can lead to vapours/gases hazardous to health (e.g. CO, NO<sub>x</sub>, isocyanates) being formed.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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**· LD/LC50 values relevant for classification:**
**280-57-9 triethylenediamine**

Oral | LD50 | 1,700 mg/kg (rat)

**· Specific symptoms in biological assay:**
**· Skin corrosion/irritation**

Causes skin irritation.

Liquid may irritate the skin

**· Serious eye damage/irritation**

Causes serious eye irritation.

May cause severe irritation to the eyes. Visual disturbances including blurred vision.

**· Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

**· Other information (about experimental toxicology):**

Target Organs: Skin, eyes.

Inhalation: Not relevant at normal temperatures. When heated irritating vapours may be formed.

Ingestion: Harmful if swallowed

**· Additional toxicological information:**
**· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
**· Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**· Carcinogenicity** Based on available data, the classification criteria are not met.

**· Reproductive toxicity** Based on available data, the classification criteria are not met.

**· STOT-single exposure** Based on available data, the classification criteria are not met.

**· STOT-repeated exposure** Based on available data, the classification criteria are not met.

**· Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

**· 12.1 Toxicity**

The product contains substances, which may cause long term adverse effects in the aquatic environment

May decrease acidity of aquatic systems to pH &gt;10 which is toxic to aquatic organisms.

**· Aquatic toxicity:** No further relevant information available.

**· 12.2 Persistence and degradability** This product is expected to be biodegradable

**· 12.3 Bioaccumulative potential**

This product does not contain any substances expected to be bioaccumulating

**· 12.4 Mobility in soil**

This product is completely water soluble and therefore may spread into water systems

**· Additional ecological information:**
**· General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**· 12.5 Results of PBT and vPvB assessment**
**· PBT:** Not applicable.

**· vPvB:** Not applicable.

**· 12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

**· 13.1 Waste treatment methods**
**· Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Do not dispose to landfill or water courses. Disposal must be by means of a licensed waste contractor

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- **Recommendation:**  
Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

- |   |                 |
|---|-----------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, ADN, IMDG, IATA</b>                                    | Void            |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, ADN, IMDG, IATA</b>                      | Void            |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | Void            |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | Void            |
| · <b>14.5 Environmental hazards:</b><br>· <b>Marine pollutant:</b>                          | No              |
| · <b>14.6 Special precautions for user</b>  | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | Not applicable. |
| · <b>UN "Model Regulation":</b>   | Void            |

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge and should assist the user with the safe handling of this material when properly applied. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.
- **Department issuing SDS:** Sales department
- **Contact:**  
sales@agarscientific.com  
Tel: +44 (0) 1279 813 519
- **Abbreviations and acronyms:**  
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· \* **Data compared to the previous version altered.**

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