



SAFETY DATA SHEET

Citifluor AF200 Antifadent solution

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Citifluor AF200 Antifadent solution

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

Identified uses A glycerol-based antioxidant solution for use in fluorescence microscopy.

1.3. Details of the supplier of the safety data sheet

Supplier	Citifluor, A Division of Electron Microscopy Sciences 1560 Industry Road P.O. Box 550 Hatfield, PA 19440 USA Tel: 215-412-8400 Fax: 215-412-8450
Contact Person	Stacie Kirsch sgkcck@aol.com

1.4. Emergency telephone number

215-412-8400

Note: Office hours only.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Skin Sens. 1 - H317
Environment	Not classified.

Classification (1999/45/EEC)

R43.

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

Human health

The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.

Environment

The product is not expected to be hazardous to the environment.

2.2. Label elements

Contains propyl gallate

Label In Accordance With (EC) No. 1272/2008

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Signal Word	Warning	
Hazard Statements		
Precautionary Statements	H317	May cause an allergic skin reaction.
	P101	If medical advice is needed, have product container or label at hand.
	P280	Wear protective gloves.
	P264	Wash contaminated skin thoroughly after handling.
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.
Supplementary Precautionary Statements	P402+404	Store in a dry place. Store in a closed container.
	P501	Dispose of contents/container in accordance with local regulations.
	P301+330+331+313	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

glycerol			60-95%
CAS-No.: 56-81-5	EC No.: 200-289-5	Registration Number: 01-2119471987-18-XXXX	
Classification (EC 1272/2008) Not classified.		Classification (67/548/EEC) Not classified.	
propyl gallate			0-10%
CAS-No.: 121-79-9	EC No.: 204-498-2		
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Sens. 1 - H317		Classification (67/548/EEC) Xn;R22 R43	

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

Remove affected person from source of exposure.

Inhalation

If unconscious place 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.

Get medical attention if symptoms persist.

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Ingestion

If swallowed do NOT induce vomiting. Never give anything by mouth to an unconscious person. If patient vomits keep head low to prevent vomit entering lungs. If conscious give 1 - 2 glasses of water to drink.

Rinse mouth thoroughly and seek medical attention immediately. Keep patient at rest.

Skin contact

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and running water. Take especial care to clean folds, crevices, creases and groin.

Get medical attention.

Launder clothing and clean shoes thoroughly before re-use.

Eye contact

Check for contact lenses which must be removed from the eyes before rinsing.

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.

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

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

During fire, toxic gases (CO, CO₂, NO_x) are formed.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Protective equipment for fire-fighters

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

Wear protective gloves.

6.2. Environmental precautions

Prevent discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

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. Do not contaminate water sources or sewer.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

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7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
glycerol	WEL		10 mg/m3			

WEL = Workplace Exposure Limit.

glycerol (CAS: 56-81-5)

DNEL					
Industry	Inhalation.	Long Term	Local Effects	56 mg/m3	
Consumer	Inhalation.	Long Term	Local Effects	33 mg/m3	
Consumer	Oral	Long Term	Systemic Effects	229 mg/kg/day	
PNEC					
Freshwater	0.885	mg/l			
Marinewater	88.5	µg/l			
Sediment (Marinewat	8.85	mg/l			
Water	1000	mg/l			
Sediment (Freshwate	3.3	mg/kg			
Sediment (Marinewat	0.33	mg/kg			
Soil	0.141	mg/kg			

8.2. Exposure controls

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

If ventilation is insufficient suitable respiratory protection must be provided.

Seek advice and recommendations of the manufacturer or supplier of equipment

Hand protection

Wear suitable protective gloves conforming to EN 374. Seek recommendations from manufacturer or supplier.

Eye protection

Wear tightly fitting safety goggles conforming to EN 166.

Other Protection

Minimise all forms of skin contact. Overalls and footwear with oil and chemical resistant soles should be worn. Launder overalls and undergarments regularly.

Hygiene measures

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 with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Clear colourless liquid.
Solubility	Completely soluble in water

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stable under normal conditions of storage and use. See section 7.

10.3. Possibility of hazardous reactions

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Not known.

10.4. Conditions to avoid

Protect from sunlight, open flames, sources of heat and humidity.

10.5. Incompatible materials

Materials To Avoid

Acids, non-oxidising.

10.6. Hazardous decomposition products

During fire, toxic gases (CO, CO₂, NO_x) are formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

No data are available for this product. It has been classified according to the calculation procedure of the EC Dangerous Preparations Directive using known information and calculated data about the individual components then read across to the Classification, Labelling and Packaging of substances and mixtures directive (as amended).

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

May cause discomfort if swallowed.

Skin contact

May cause sensitisation by skin contact.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

No data is available for this preparation. Classified according to the calculation procedure of the EC Dangerous Preparations Directive using known data and information about the individual components

12.2. Persistence and degradability

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.

12.4. Mobility in soil

Mobility:

The product contains substances, which are water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

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General information

Product is hazardous waste. Do not allow into drains, sewers or water courses.

Disposal must be by means of a licensed waste contractor.

13.1. Waste treatment methods

Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.

SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

Transport Labels

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 MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 SI No 716. (CHIP4).

Control of Substances Hazardous to Health Regulations (as amended). (COSHH)

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007. (CDG 2009)

Approved Code Of Practice

The Control of Substances Hazardous to Health Regulations 2002 (as amended). Approved code of practice and guidance.

Fifth Edition 2005. HSE Books, or download at: <http://www.hse.gov.uk/pubns/priced/I5.pdf>

Guidance Notes

Workplace Exposure Limits EH40.

CHIP for everyone HSG(108).

Assessing and managing the risks at work from skin exposures to chemical agents (HSG 205).

Controlling skin exposure to chemicals and wet-work (British Occupational Health Society (2008)).

S101: Selecting protective gloves (HSE 04/06).

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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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

ADR (L'Accord européen relative au transport international des marchandises dangereuses par route.)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

Comprehensive revision.

New format SDS, including classification to CLP (EC 1272/2008).

And translated into the language of this document as of the date below.

Revision Date 29-APR-13

Revision 02 replaces 01

Supersedes date 17-JUN-08

Risk Phrases In Full

R22 Harmful if swallowed.

R43 May cause sensitisation by skin contact.

NC Not classified.

Hazard Statements In Full

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

Disclaimer

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.