



SAFETY DATA SHEET

Citifluor CFM-3

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

1.1 Product identifier

Product name Citifluor CFM-3

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

Identified uses: A buffered aqueous-glycerol solution of a phenolic antioxidant for use in fluorescence microscopy

Uses advised against:

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 [number])

Physical and chemical Hazards	not classified
Human health	Eye Irrit. 2 – H317,H319
Environment	not classified

Classification (1999/45/EEC) Xi;R36,R43

The full text of all R-phrases and Hazard Statements are displayed in Section 16.

Human Health

May irritate eyes

Environment

This product is not expected to be hazardous to the environment

2.2 Label elements

Label in accordance With (EC No 1272/2008)



Signal Word Warning

Hazard Statements

H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Precautionary Statements

P101	If medical advice is needed, have product container and label at hand
P264	Wash contaminated skin thoroughly after handling
P305+351+338	IF IN EYES: IF ON EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+313+313	If eye irritation or a rash occurs: Get medical advice/attention
P404	Store in a closed container
P501	Dispose of contents/container in accordance with local regulations.

2.3 Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Pyridine N-oxide 30-60%
CAS-No: 694-59-7

EC No: 211-774-6

Classification
Classification (EC 1272/2008) Eye Irrit. 2 – H319
Classification (67/548/EEC) Xi; R36

Glycerol 30-60%
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 1-5%
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

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues. Rinse and clean nose and mouth with water. Artificial respiration may be administered by suitably qualified first aiders.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention if any discomfort continues. If patient vomits keep head low to prevent vomit entering the lungs.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and running water. Take special care to clean folds, crevices and groin. Get medical attention.

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

This product is not flammable. Use fire extinguishing media appropriate for surrounding materials

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

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

Unusual Fire and Explosion Hazards

No unusual fire and explosion hazards noted

5.3 Advice for fire-fighters

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. Eye contact MUST be prevented by means of suitable personal protection equipment

6.2 Environmental precautions

Do not allow ANY environmental contamination. 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. Flushings must not be allowed to contaminate ground or enter drains, sewers or water courses.

6.4 Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid spilling, skin and eye contact. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Name	STD	TWA – 8 hrs	STEL – 15 min
Glycerol	WEL	10mg/m ³	

WEL – Workplace exposure limit

8.2 Exposure controls

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of vapours.

Respiratory equipment

In case of inadequate ventilation or when the product is heated use suitable respiratory equipment with gas filter (type A2).

Hand protection

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.

Eye protection

Use approved safety goggles or face shield.

Other protection

Wear appropriate clothing to prevent any possibility of skin contact.

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 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless liquid
Odour	Almost odourless
Solubility	Completely soluble in water
pH 7- +8	

9.2 Other information

Refractive index 1.52 @20⁰C

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

Not known

10.4 Conditions to avoid

Strong oxidising agents

10.5 Incompatible materials

10.6 Hazardous decomposition products

Decomposition can lead to the formation of toxic gases or fumes, including carbon monoxide (CO), carbon dioxide (CO₂) and nitrous gases (NO_x).

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 individual components then read across to the Classification, Labelling and Packaging substances and mixtures directive (as amended).

Inhalation

Not relevant at room temperatures. When heated, irritating vapours may be formed.

Ingestion

May cause discomfort if swallowed.

Skin contact

May cause defatting of the skin, but is not an irritant. Not a skin sensitiser.

Eye contact

Irritating and may cause redness and pain

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 individual components.

12.2 Persistence and degradability

Degradability

This product is expected to be biodegradable

12.3 Bioaccumulative potential

Bioaccumulative potential

This product does not contain any substances expected to be bioaccumulating

12.4 Mobility in soil

Mobility:

The product is completely 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

The product may contribute to an excessive enrichment of the aquatic environment with nutrients.

SECTION 13: DISPOSAL CONSIDERATIONS

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)

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 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).

Management of Health & Safety at Work Regulations 1999.

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/15.pdf>

Guidance notes

COSHH essentials. 'Easy steps to control chemicals'. Only available on HSE's website and regularly updated at

<http://www.hse.gov.uk/pubns/guidance/inex.htm>

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)

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and 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	12-Sept-13
Revision	02 replaces 01
Supersedes date	25-Mar-04
Risk phrases in full	
R43	May cause sensitisation by skin contact
R22	Harmful if swallowed
R11	Highly flammable
R36/38	Irritating to eyes and skin
R36	Irritating to eyes
R53	May cause long term adverse effects in the aquatic environment
NC	Not classified
Hazard statements in full	
H319	Causes serious eye irritation
H315	Causes skin irritation
H317	May cause an allergic skin reaction.
H228	Flammable solid
H302	Harmful if swallowed
H413	May cause long lasting harmful effects to aquatic life

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.