SAFETY DATA SHEET
Citifluor AF87 (low fluorescence) Immersion oil

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

1.1. Product identifier
Product name Citifluor AF87 (low fluorescence) Immersion oil

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses A synthetic oil-based amine solution for use in fluorescence microscopy.

1.3. Details of the supplier of the safety data sheet
Supplier Citifluor Ltd.
18 Enfield Cloisters
Fanshaw Street
London
N1 6LD
United Kingdom
Tel: +44 (0)20 7739 6561
Fax: +44 (0)20 7729 2936
Contact Person R Stephen Davidson
davidson@citifluor.co.uk

1.4. Emergency telephone number
+44 (0)207 739 6561
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 Not classified.
Environment Not classified.
The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.
Human health
Prolonged skin contact may cause temporary irritation.
Environment
The product contains a substance which may cause long term adverse effects in the aquatic environment.
Physical and Chemical Hazards
Prolonged contact with air may cause formation of explosive peroxides.

2.2. Label elements
Label In Accordance With (EC) No. 1272/2008
No pictogram required.
Precautionary Statements
P101 If medical advice is needed, have product container or label at hand.
**Citifluor AF87 (low fluorescence) Immersion oil**

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P264</td>
<td>Wash contaminated skin thoroughly after handling.</td>
</tr>
<tr>
<td>P314</td>
<td>Get medical advice/attention if you feel unwell.</td>
</tr>
<tr>
<td>P404</td>
<td>Store in a closed container.</td>
</tr>
<tr>
<td>P501</td>
<td>Dispose of contents/container in accordance with local regulations.</td>
</tr>
</tbody>
</table>

### 2.3. Other hazards

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

<table>
<thead>
<tr>
<th>Compound</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3,5-triisopropylbenzene</td>
<td>5-10%</td>
</tr>
<tr>
<td>triethylenediamine</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>717-74-8</td>
<td>211-941-3</td>
</tr>
<tr>
<td>280-57-9</td>
<td>205-999-9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification (EC 1272/2008)</th>
<th>Classification (67/548/EEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUH019</td>
<td>Xn;R65.</td>
</tr>
<tr>
<td>EUH066</td>
<td>R66,R67,R19.</td>
</tr>
<tr>
<td>STOT SE 3 - H336</td>
<td>Asp. Tox. 1 - H304</td>
</tr>
<tr>
<td>Flam. Sol. 1 - H228</td>
<td>Flammable.</td>
</tr>
<tr>
<td>Acute Tox. 4 - H302</td>
<td>Xi;R36/38.</td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td>F;R11. R53.</td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
</tr>
<tr>
<td>Aquatic Chronic 4 - H413</td>
<td></td>
</tr>
</tbody>
</table>

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

**Composition Comments**
The product contains organic solvents.

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

**General information**
Remove affected person from source of exposure. Provide fresh air, first-aid, warmth and rest. Never give victim anything to drink if they are unconscious.

**Inhalation**
Clean nose and mouth with water. If unconscious or breathing is irregular artificial respiration may be administered by suitably qualified first-aiders. If symptoms persist, get medical attention.

**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 if irritation persists or develops. Launder clothing and clean shoes thoroughly before reuse.
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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

General information
The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
Extinguishing media
Extinguish with foam, carbon dioxide, dry powder, sand, dolomite or other inert material.
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, NOx) 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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Ventilate to dispel any residual vapour. Clean-up personnel should use respiratory protection, gloves, goggles and protective clothing and footwear (see section 8). Keep unnecessary people at a safe distance.

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up
Ventilate well. Extinguish all ignition sources. Avoid sparks, flames, heat. No smoking. Keep flammable materials away from spillage. Clean-up personnel should use respirator and liquid contact protection.
Absorb in vermiculite, dry sand or earth and place into containers. Wash well after dealing with spillage. Inform authorities if large amounts are involved.
Rinse site with copious amounts of water, which should not be allowed into 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. Avoid prolonged or repeated contact. Use suitable protective goggles, gloves and clothing (see section 8).

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1. Control parameters

Ingredient Comments
No exposure limits noted for ingredient(s).

8.2. Exposure controls

Engineering measures
Provide adequate general and local exhaust ventilation.
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. After using gloves the hands should be washed and dried thoroughly and a suitable moisturiser applied. Suitable gloves may include - Nitrile. Viton rubber (fluor rubber).
Eye protection
Wear approved safety goggles.
Other Protection
Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour 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. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Clear Colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight odour. Musty (mouldy).</td>
</tr>
<tr>
<td>Solubility</td>
<td>Immiscible with water</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>&gt;200°C</td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Contact with air and light may form explosive peroxides.

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
Avoid exposure to heat in any form, including sunlight.

10.5. Incompatible materials
Materials To Avoid
Strong reducing agents.

10.6. Hazardous decomposition products
Decomposition can lead to the formation of toxic gases or fumes, including carbon monoxide (CO) and carbon dioxide (CO2). Nitrous gases (NOx).
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
Not relevant at normal room temperatures. When heated, irritating vapours may be formed.

Ingestion
Aspiration hazard if swallowed; harmful if liquid is aspirated into the lungs, may even prove fatal. Accidental swallowing of small quantities is unlikely to cause harm but larger amounts may cause nausea and diarrhoea.

Skin contact
May cause defatting of the skin, but is not an irritant.

Eye contact
May cause temporary eye irritation.

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 slowly biodegradable.

12.3. Bioaccumulative potential
Bioaccumulative potential
Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

12.4. Mobility in soil
Mobility:
The product is immiscible with water and will spread on the water surface.

12.5. Results of PBT and vPvB assessment
Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects
The product contains volatile, organic compounds which have a photochemical ozone creation potential.

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
Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION
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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


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


Guidance Notes

Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

The storage of flammable liquids in containers HSG51 (HSE 1998).

EU Legislation

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.
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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 03 replaces 02
Supersedes date 28-MAR-04
Risk Phrases In Full
R22 Harmful if swallowed.
R65 Harmful: may cause lung damage if swallowed.
R11 Highly flammable
R36/38 Irritating to eyes and skin.
R53 May cause long-term adverse effects in the aquatic environment.
R19 May form explosive peroxides.
NC Not classified.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
Hazard Statements In Full
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H228 Flammable solid.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H413 May cause long lasting harmful effects to aquatic life.
EUH019 May form explosive peroxides.
EUH066 Repeated exposure may cause skin dryness or cracking.

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 as 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.