

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Revision Date Sept.10th, 2019

Version 1.1

**SECTION 1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Catalogue No. 15008 - 15009  
Product name Immersion oil for microscopy

REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

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

Identified uses In vitro diagnostic reagent, Reagent for analysis

**1.3 Details of the supplier of the safety data sheet**

Responsible Department Technical Dept. support@optikamicroscopes.com  
Regional representation OPTIKA SRL  
Via Rigla 30, 24010 Ponteranica (BG)  
Italy

**1.4 Emergency telephone numbers**

AUSTRIA	Health Austria GmbH	0043 1 515 61-0
BELGIUM	Antigifcentrum	0032 02 264 96 36
BULGARIA	National Clinical Toxicology Centre, Emergency Medical Institute "Pirogov"	00359 2 9154 409
CROATIA	Institute for Medical Research and Occupational Health	0038 512348342
CZECH REP.	Klinika pracovního lékařství VFN a 1. LF UK	00420 224 91 92 93
DENMARK	Bispebjerg Hospital	0045 8212 1212
ESTONIA	EAPCCT	00372 7943 794
FINLAND	Poisons Information Centre	00358 9 471 977
FRANCE	C.A.P.T.V	0033 01 40 05 48 48
GERMANY	Poison Emergency Call of the Charité	0049 30 450 000 000
GREECE	Poison Information Centre Children's Hospital "P & A Kyriakou"	0030 2107793777
IRELAND	National Poisons Information Centre	00353 (1) 809 2166
ITALY	Centro Antiveleni Niguarda	0039 0264447050
LATVIA	Latvian Poisons Information Centre - Clinical Hospital "Gailezers"	00371 7042673
LITHUANIA	Vilnius Public Health Centre	00370 5 212 4098
NETHERLANDS	University Medical Center Utrecht	0031 030 2748888
POLAND	Pracownia Informacji Toksykologicznej i Analiz Laboratoryjnych	0048 (12) 411 99 99
PORTUGAL	Instituto Nacional de Emergência Médica	00351 213 508 100
ROMANIA	TOXAPEL Emergency Clinical Hospital for Children "Grigore Alexandrescu" *	0040 2121 06282
SLOVAKIA	NATIONAL TOXICOLOGICAL INFORMATION CENTRE - University Hospital Bratislava	00421 2 5477 4166
SLOVENIA	Univerzitetni klinični center Ljubljana	00386 41 650 500
SPAIN	Servicio de Información Toxicológica Instituto Nacional de Toxicología	0034 91 562 04 20
SWEDEN	Swedish Poisons Information Centre	0046 10 456 6700
UK	Edinburgh Clinical Toxicology	0131 242 1360
HUNGARY	National Institute of Chemical Safety	0036 80 20 11 99

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I T A L Y

Catalogue No. 15008 - 15009  
Product name Immersion oil for microscopy

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## SECTION 2. Hazards identification

### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute aquatic toxicity, Category 1, H400

Chronic aquatic toxicity, Category 2, H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

*Hazard pictograms*



*Signal word*

Warning

*Hazard statements*

H410 Very toxic to aquatic life with long lasting effects.

*Precautionary statements*

Prevention

P273 Avoid release to the environment.

Reduced labelling (≤125 ml)

*Hazard pictograms*



*Signal word*

Warning

### 2.3 Other hazards

None known.

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## SECTION 3. Composition/information on ingredients

Chemical nature Mixture of organic compounds

### 3.1 Substance

Not applicable

### 3.2 Mixture

#### Hazardous components (REGULATION (EC) No 1272/2008)

*Chemical name (Concentration)*

CAS-No.	Registration number	Classification
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Benzyl benzoate ( $\geq 25\%$ - $< 50\%$ )		
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120-51-4	*)	
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Acute toxicity, Category 4, H302

Acute aquatic toxicity, Category 1, H400

Chronic aquatic toxicity, Category 2, H411

\*) A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## SECTION 4. First aid measures

### 4.1 Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

After eye contact: rinse out with plenty of water.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

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irritant effects, agitation, spasms, Diarrhoea, Nausea, Vomiting, cardiovascular disorders, ataxia (impaired locomotor coordination)

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

No information available.

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### SECTION 5. Firefighting measures

#### 5.1 Extinguishing media

*Suitable extinguishing media*

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

*Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

#### 5.2 Special hazards arising from the substance or mixture

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

#### 5.3 Advice for firefighters

*Special protective equipment for firefighters*

In the event of fire, wear self-contained breathing apparatus.

*Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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### SECTION 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

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## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb<sup>®</sup>). Dispose of properly. Clean up affected area.

## 6.4 Reference to other sections

Indications about waste treatment see section 13.

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## SECTION 7. Handling and storage

### 7.1 Precautions for safe handling

#### *Advice on safe handling*

Observe label precautions.

#### *Hygiene measures*

Change contaminated clothing. Wash hands after working with substance.

### 7.2 Conditions for safe storage, including any incompatibilities

#### *Storage conditions*

Tightly closed.

Recommended storage temperature see product label.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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## SECTION 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

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## Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

## Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

### *Eye/face protection*

Safety glasses

### *Hand protection*

full contact:

Glove material:	butyl-rubber
Glove thickness:	0.7 mm
Break through time:	> 480 min

splash contact:

Glove material:	polychloroprene
Glove thickness:	0.65 mm
Break through time:	> 30 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 898 Butoject® (full contact), KCL 720 Camapren® (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet (>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

### *Respiratory protection*

Not required; except in case of aerosol formation.

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## Environmental exposure controls

Do not let product enter drains.

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## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	liquid
Colour	light yellow
Odour	characteristic
Odour Threshold	No information available.
pH	No information available.
Melting point	No information available.
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Relative vapour density	No information available.

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Density ca.1.02 g/cm<sup>3</sup>  
at 20 °C

Relative density No information available.

Water solubility at 20 °C  
practically insoluble

Partition coefficient: n-  
octanol/water No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic 100 - 120 mPa.s  
at 20 °C

Explosive properties Not classified as explosive.

Oxidizing properties none

## 9.2 Other data

none

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## SECTION 10. Stability and reactivity

### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents



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## 10.4 Conditions to avoid

Strong heating.

## 10.5 Incompatible materials

various plastics, Light metals, metal alloys

## 10.6 Hazardous decomposition products

no information available

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## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects

#### Mixture

#### *Acute oral toxicity*

Symptoms: Nausea, Vomiting, Diarrhoea

Acute toxicity estimate: > 2,000 mg/kg

Calculation method

#### *Acute inhalation toxicity*

Symptoms: Possible damages: slight mucosal irritations

#### *Acute dermal toxicity*

This information is not available.

#### *Skin irritation*

Possible damages: slight irritation

#### *Eye irritation*

Possible damages: slight irritation

#### *Sensitisation*

Sensitisation possible in predisposed persons.

#### *Germ cell mutagenicity*

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This information is not available.

*Carcinogenicity*

This information is not available.

*Reproductive toxicity*

This information is not available.

*Teratogenicity*

This information is not available.

*Specific target organ toxicity - single exposure*

This information is not available.

*Specific target organ toxicity - repeated exposure*

This information is not available.

*Aspiration hazard*

This information is not available.

## 11.2 Further information

After absorption of large quantities:

Systemic effects:

cardiovascular disorders, agitation, spasms, ataxia (impaired locomotor coordination)

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

## Components

*Benzyl benzoate*

*Acute oral toxicity*

LD50 Rat: 1,904 mg/kg

(RTECS)

*Acute dermal toxicity*

LD50 Rabbit: 4,000 mg/kg

(RTECS)

*Skin irritation*

Rabbit

Result: No skin irritation

OECD Test Guideline 404

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## *Eye irritation*

Rabbit

Result: No eye irritation

OECD Test Guideline 405

## *Sensitisation*

Patch test: human

Result: negative

(IUCLID)

Sensitisation test: Guinea pig

Result: negative

(IUCLID)

Sensitisation test: Mouse

Result: negative

Method: OECD Test Guideline 429

## *Germ cell mutagenicity*

*Genotoxicity in vitro*

Ames test

Result: negative

(IUCLID)

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## SECTION 12. Ecological information

### Mixture

#### 12.1 Toxicity

No information available.

#### 12.2 Persistence and degradability

No information available.

#### 12.3 Bioaccumulative potential

No information available.

#### 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

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Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

## 12.6 Other adverse effects

Discharge into the environment must be avoided.

## Components

### *Benzyl benzoate*

#### *Toxicity to fish*

semi-static test LC50 Danio rerio (zebra fish): 0.29 mg/l; 96 h

Analytical monitoring: yes

Directive 67/548/EEC, Annex V, C.1.

#### *Toxicity to daphnia and other aquatic invertebrates*

static test EC50 Daphnia magna (Water flea): 3.09 mg/l; 48 h

Analytical monitoring: yes

OECD Test Guideline 202

#### *Toxicity to algae*

static test ErC50 Pseudokirchneriella subcapitata (green algae): 0.475 mg/l; 72 h

Analytical monitoring: yes

OECD Test Guideline 201

#### *Toxicity to bacteria*

static test EC50 activated sludge: > 10,000 mg/l; 3 h

OECD Test Guideline 209

#### *Biodegradability*

94 %; 28 d; aerobic

C.4-D of the COUNCIL REGULATION (EC) No 440/2008

Readily biodegradable

#### *Partition coefficient: n-octanol/water*

log Pow: 3.97 (25 °C)

(experimental)

(Lit.) Bioaccumulation is not expected.

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## SECTION 13. Disposal considerations

### *Waste treatment methods*

Notice Directive on waste 2008/98/EC.

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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## SECTION 14. Transport information

### Land transport (ADR/RID)

14.1 UN number UN 3082  
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (BENZYL BENZOATE)  
14.3 Class 9  
14.4 Packing group III  
14.5 Environmentally hazardous yes  
14.6 Special precautions for user yes  
Tunnel restriction code E

Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

### Inland waterway transport (ADN)

Not relevant

### Air transport (IATA)

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14.1 UN number UN 3082  
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (BENZYL BENZOATE)  
14.3 Class 9  
14.4 Packing group III  
14.5 Environmentally hazardous yes  
14.6 Special precautions for user no

Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

## Sea transport (IMDG)

14.1 UN number UN 3082  
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (BENZYL BENZOATE)  
14.3 Class 9  
14.4 Packing group III  
14.5 Environmentally hazardous yes  
14.6 Special precautions for user yes

EmS F-A S-F

Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

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## SECTION 15. Regulatory information

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

### *EU regulations*

Major Accident Hazard SEVESO III  
Legislation ENVIRONMENTAL HAZARDS  
E1  
Quantity 1: 100 t  
Quantity 2: 200 t

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Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work.

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC not regulated

Substances of very high concern (SVHC) This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq 0.1\%$  (w/w).

#### *National legislation*

Storage class 10 - 13

## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

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## SECTION 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.  
H400 Very toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.

#### Training advice

Provide adequate information, instruction and training for operators.

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## Labelling

*Hazard pictograms*



*Signal word*

Warning

*Hazard statements*

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

*Precautionary statements*

Prevention

P273 Avoid release to the environment.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

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*The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.*