SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Version 2.0 Material:
Revision date: 25.02.2015 Print Date 14.01.2016

1. Identification of the substance / preparation and the company / undertaking

Trade name	:	Immersol™ 518 F / 30 °C
Manufacturer/supplier	:	Carl Zeiss Jena GmbH Oberkochen location
Address	:	Carl-Zeiss-Straße 22 D-73447 Oberkochen
Telephone	:	+49 7364 20-0
Technical Information	:	Chemical and material engineering
Telephone	:	+49 7364 20-4599
Telefax	:	+49 7364 20-4521
Product Safety Mailto	:	Chemical and material engineering gabriele.zeiher@zeiss.com, uwe.hamm@zeiss.com
Emergency telephone number Telephone	:	Poisening Control Center +49 551 19240 (24 hours)

Use of the Substance / Preparation

Sector	:	Life Sciences, Research and Development
Application category	:	Industrial and professional use
Use	:	Immersion oil for fluorescence-microscopy, halogen-free, low fluorescence

For application information, consult the processing instructions. Processing instructions or technical information sheet available on request.

2. Hazards identification

Classification according to Regulation (EC) No. 1272/2008 (GHS) [1]

Skin irritation, Category 2
H315: Causes skin irritation.

Chronic aquatic toxicity, Category 2
H411: Toxic to aquatic life with long lasting effects.

Classification procedure: Generic / specific concentration limits for classification

Classification according to Directive 67/548/EEC or Directive 1999/45/EC [2]

Xi: Irritant
R38: Irritating to skin.

Dangerous for the environment
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For footnotes, see section 16.

3. Composition / information on ingredients

Information on the substance / preparation (mixture)

Halogen-free immersion oil based on ester oil.

Hazardous components

Description	Number(s)	Concentration	Symbol(s) Pictogram(s)	R-phrase(s) Hazard statements
Adipic acid-di(8-methyl-tricyclo(5.2.1.0.2.6.) decane) ester	Registration NumberREACH: 01-0000017636-64-0000 EC: CAS: 195371-10-9	50,00 - 60,00%	Xi	R38
				H315
Bis (isopropyl) naphthalene	Registration NumberREACH: 01-2119565150-48-0000 EC: 254-052-6 CAS: 38640-62-9	10,00 - 20,00%	Xn, N	R65-R51/53
				H304, H410

For the full text of the R phrases, see section 16
For the full text of the Hazard statements, see section 16.

4. First aid measures

General advice	:	Take off all contaminated clothing immediately.
Inhalation	:	Provide with fresh air. In the case of inhalation of aerosol/mist consult a physician if necessary.
Skin contact	:	Wash off with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician.
Eye contact	:	Rinse immediately with plenty of water for at least 5 minutes. If symptoms persist, call a physician.
Ingestion	:	Rinse mouth. Only trained first-aid staff may induce vomiting. Consult a physician.

5. Fire-fighting measures

Suitable extinguishing media	:	Carbon dioxide (CO2), Dry chemical, Foam, water spray jet
Extinguishing media which shall not be used for safety reasons	:	High volume water jet
Hazards caused by the substance/combustion products/origin of gases	:	In case of fire formation of carbonoxides and other toxic gases/vapors is possible. In the event of fire and/or explosion do not breathe fumes.
Special protective equipment	:	In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions	:	Avoid contact with skin, eyes and clothing.
Environmental precautions	:	Do not discharge into sewerage system, surface water or soil.
Removal	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Adequate disposal.

7. Handling and storage

Handling

Safe handling advice	:	Avoid contact with skin and eyes.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers	:	Store at room temperature in the original container. Keep tightly closed.
Incompatibilities/not to be stored with	:	Keep away from food and drink. Do not mix with other immersion liquids.

8. Exposure controls / personal protection

Exposure limit(s)

Note	:	None.

Occupational exposure controls

Protective measures	:	Avoid contact with skin, eyes and clothing.
Hygiene measures	:	Take off all contaminated clothing immediately. When using, do not eat, drink or smoke.
Respiratory protection	:	Not required; except in case of aerosol formation.
Hand protection	:	Avoid contact with skin. Use protective gloves which have been adapted to the respective purpose and are appropriately resistant to chemicals (DIN EN 374). Ask the glove supplier for the penetration time of the glove material.
Eye protection	:	Avoid contact with eyes, if necessary wear eye protection.
Skin and body protection	:	closed work clothing

Environmental exposure controls

Additional advice	:	see section 6

9. Physical and chemical properties

General Information

Form	:	liquid
Colour	:	colourless
Odour	:	slight aromatic

Important Health Safety and Environmental Information

Boiling point/boiling range	:	> 250 °C
Flash point	:	218 °C (open cup)
Density	:	1,009 g/cm3 at 20 °C (DIN 51757)
Water solubility	:	insoluble
Viscosity, kinematic	:	320 mm2/s at 40 °C (DIN 51562)

10. Stability and reactivity

Thermal decomposition	:	No decomposition if stored and applied as directed.
Hazardous reactions	:	None known.
Conditions to avoid	:	Keep away from heat.
Hazardous decomposition products	:	None known.
Hazardous decomposition products in the event of fire	:	In case of fire formation of carbonoxides and other toxic gases/vapors is possible.

11. Toxicological information

Toxicology tests

Skin irritation	:	Irritating to skin.
Eye irritation	:	May cause eye irritation.

General Information

Other information on toxicity	:	The mixture itself is not examinated. The data refer to the specifications of the ingredients. Health injuries are not known or expected under normal use. The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Other environmental data

Other data	:	No data is available on the product itself. Ecological injuries are not known or expected under normal use. Do not discharge into sewerage system, surface water or soil. Adequate disposal.

13. Disposal considerations

Product	:	In accordance with local and national regulations.
Uncleaned packaging	:	Dispose of as unused product.

14. Transport information

Land transport ADR/RID

Class :	9	UN No. :	3082	Packaging group :	III
Classification code :	M6				
Labels :	9				
Description of the goods :	Environmentally hazardous substance, liquid, n.o.s. (Bis (isopropyl) naphthalene, mixture)				

Sea transport IMDG

Class :	9	UN No. :	3082	Packaging group :	III
		EmS :	F-A, S-F		
Marine pollutant :	Marine pollutant				
Labels :	9				
Description of the goods :	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BIS (ISOPROPYL) NAPHTHALENE, MIXTURE)				

Air transport ICAO/IATA

Class :	9	UN No. :	3082	Packaging group :	III
Labels :	9				
Description of the goods :	Environmentally hazardous substance, liquid, n.o.s. (Bis (isopropyl) naphthalene, mixture)				

15. Regulatory information

Labelling according to Regulation (EC) No. 1272/2008 (GHS) [1]

Signal word: Warning

Hazard statements

H315	:	Causes skin irritation.
H411	:	Toxic to aquatic life with long lasting effects.

Precautionary statements

P273	:	Avoid release to the environment.
P280	:	Wear protective gloves.
P302 + P352	:	IF ON SKIN: Wash with plenty of soap and water.

For footnotes, see section 16.

Labelling according to Directive 67/548/EEC or Directive 1999/45/EC [2]

Letter(s) for the symbol(s) and indications of danger

Xi : Irritant

R-phrase(s)

R38	:	Irritating to skin.
R52/53	:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S37	:	Wear suitable gloves.
S61	:	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

For footnotes, see section 16.

EU-Regulations

Seveso Directive II	:	96/82/EG: Does not fall under Seveso II - Directive / Major accident legislation
Restrictions	:	92/85/EWG: Follow Directive 92/85/EC on the protection of pregnant workers and workers who have recently given birth or are breastfeeding, and its national implementations.
	:	94/33/EG: Follow Directive 94/33/EC on the protection of young people at work and its national implementations.

16. Other information

The information in this safety sheet is based on the data available at the time of compilation and is intended to describe the product with respect to the precautions to be taken in its use. This information is provided without any guarantee of the properties specified.

Update information

Relevant changes to the previous version are symbolized by vertical bars at the left edge.

Additions : Section 14

Full text of R-phrases mentioned in Section 3

R38 : Irritating to skin.
R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 : Harmful: may cause lung damage if swallowed.

Full text of Hazard statements mentioned in Section 3

H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation.
H410 : Very toxic to aquatic life with long lasting effects.

Additional advice

Sources: Reg. 1272/2008, Annex VI, TRGS 900, Supplier details, TRGS 903, International dangerous goods regulations

Footnotes:
1] Obligatory for substances from December, 01, 2010, obligatory for mixtures from June, 01, 2015.
2] Valid for substances until November, 30, 2010, valid for preparations (mixtures) until May, 31, 2015.

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