



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

Version 4.0
Revision date: 03.04.2012

Material:
Print Date 22.02.2013

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

Trade name : Immersol™ 518 N

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 : Chemical and material engineering
Mailto : zeih@zeiss.de, hamm@zeiss.de

Emergency telephone number : Poisoning Control Center
Telephone : +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 microscopy, halogen-free

2. Hazards identification

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

Skin irritation, Category 2
H315: Causes skin irritation

Classification procedure: Conversion table (Regulation 1272/2008, Annex VII), Calculation method on the components

Classification according to Directive 67/548/EEC or Directive 1999/45/EC²

Xi: Irritant
R38: Irritating to skin.

For footnotes, see section 16.

3. Composition / information on ingredients

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 Number REACH: 01-0000017636-64-0 | 40,00 - 45,00% | Xi | R38 |



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| | | | | |
|-----------------------------|----------------------------------|----------------|--|------------|
| | 000 EC: CAS: 195371-10-9 | | | |
| | | | | H315 |
| Bis (isopropyl) naphthalene | EC: 254-052-6 CAS: 38640-62-9 | 20,00 - 25,00% | | R53 |
| | | | | H304, H413 |

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 : Remove and wash contaminated clothing before re-use.
- 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 for firefighters : 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 flush into surface water or sanitary sewer system. Avoid subsoil penetration.
- Removal : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. Handling and storage



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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 : Keep only in the original container. Keep tightly closed. Protect from direct insolation.
Incompatibilities/not to be stored with : Keep away from food and drink. Do not mix with other immersion liquids.

Storage stability

Storage temperature : 12 - 28 °C

8. Exposure controls / personal protection

Exposure limit(s)

Note : None.

Occupational exposure controls

Protective measures : Avoid contact with skin, eyes and clothing. Take off all contaminated clothing immediately. When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday.
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 : Keep working clothes separately.

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 : 180 °C (ISO 2592)



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Density : 0,972 g/cm³ at 20 °C (DIN 51757)
Water solubility : insoluble
Viscosity, kinematic : 840 mm²/s at 23 °C (DIN 51562)
Viscosity, kinematic : 245 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 : Protect from heat, heating sources and direct insolation.
Hazardous decomposition products : None known.
Hazardous decomposition products in the event of fire : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

11. Toxicological information

Toxicology tests

Skin irritation : Irritating to skin.
Eye irritation : None known.
Sensitisation : None known.

General Information

Other information on toxicity : No data is available on the product itself. The product is classified in accordance with EC directive / regulation. Handle in accordance with good industrial hygiene and safety practice. Health injuries are not known or expected under normal use.

12. Ecological information

Other environmental data

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

13. Disposal considerations

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



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14. Transport information

Land transport ADR/RID

Not classified as dangerous in the meaning of transport regulations.

Sea transport IMDG

Not classified as dangerous in the meaning of transport regulations.

Air transport ICAO/IATA

Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

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



Signal word: Warning

Hazard statements

H315 : Causes skin irritation

Precautionary statements

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-phrases(s)

R38 : Irritating to skin.



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S-phrase(s)

S37 : Wear suitable gloves.

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 : Classification and Labelling according to GHS (Regulation 1272/2008)

Full text of R-phrases mentioned in Section 3

R38 : Irritating to skin.
R53 : May cause long-term adverse effects in the aquatic environment.

Full text of Hazard statements mentioned in Section 3

H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation
H413 : May cause long lasting harmful effects to aquatic life.

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.