



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

Version 3.1
Revision date: 30.07.2015

Material:
Print Date 14.01.2016

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

Trade name : Immersol™ M

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 : gabriele.zeiher@zeiss.com, uwe.hamm@zeiss.com

Emergency telephone number : Poisoning Control Center
Telephone : +49 551 19240 (24 hours)

Use of the Substance / Preparation

Sector : Optical-precision engineering industry
Application category : Industrial and professional use
Use : Immersion oil for metallography, 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

Eye irritation, Category 2
H319: Causes serious eye irritation.

Chronic aquatic toxicity, Category 3
H412: Harmful 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.

N: Dangerous for the environment
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

For footnotes, see section 16.



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

Version 3.1
Revision date: 30.07.2015

Material:
Print Date 14.01.2016

3. Composition / information on ingredients

Hazardous components

Description	Number(s)	Concentration	Symbol(s) Pictogram(s)	R-phrase(s) Hazard statements
Octahydro-4,7-methano-1H-indenmethanol	EC: 250-561-2 CAS: 31308-55-1	60,00 - 70,00%	Xi	R38
				H319
Oxidipropyl dibenzoate	Registration NumberREACH: 01-2119529241-49 EC: 248-258-5 CAS: 27138-31-4	20,00 - 30,00%	N	R51/53
				H412

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 : In the case of inhalation of aerosol/mist consult a physician if necessary.
- Skin contact : Wash off with soap and plenty of water. If symptoms persist, call a physician.
- Eye contact : Immediately flush eye(s) with plenty of water. Consult a physician.
- Ingestion : Rinse mouth. Do not give anything to drink or eat. Do NOT induce vomiting. Call a physician.

5. Fire-fighting measures

- Suitable extinguishing media : Carbon dioxide (CO₂), Dry chemical, Foam, Sand, 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.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Other data : Use water spray to cool unopened containers. Avoid extinguishing water reaching water, ground water or sewage system.

6. Accidental release measures

- Personal precautions : Avoid contact with skin, eyes and clothing. Ensure adequate



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

Version 3.1
Revision date: 30.07.2015

Material:
Print Date 14.01.2016

Environmental precautions : ventilation. Sweep up to prevent slipping hazard. Prevent discharge into sewerage system, soil or aquatic environment.
Removal : Soak up with inert absorbent material. Clean contaminated surface thoroughly. Adequate disposal.

7. Handling and storage

Handling

Safe handling advice : Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms.
Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Storage

Requirements for storage areas and containers : Keep tightly closed in a dry and cool place. Keep away from direct insolation and heating sources.
Incompatibilities/not to be stored with : Do not store together with food. Do not store together with oxidizing agents.

8. Exposure controls / personal protection

Exposure limit(s)

Note : None.

Occupational exposure controls

Protective measures : Take off all contaminated clothing immediately. Wash hands before breaks and at the end of workday. Preventive skin protection
Respiratory protection : Provide sufficient air exchange and/or exhaust in work rooms.
Hand protection : Avoid contact with skin. Protective gloves recommended. 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



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

Version 3.1
Revision date: 30.07.2015

Material:
Print Date 14.01.2016

Odour : aromatic

Important Health Safety and Environmental Information

Boiling point/boiling range : > 200 °C
Flash point : 164 °C (ISO 2592)
Density : 1,067 g/cm³ at 20 °C (DIN 51757)
Water solubility : insoluble
Viscosity, kinematic : 339 mm²/s at 20 °C (DIN 51562)
Viscosity, kinematic : 263 mm²/s at 23 °C (DIN 51562)

10. Stability and reactivity

Thermal decomposition : No decomposition if used as directed.
Conditions to avoid : Keep away from heat.
Materials to avoid : Strong oxidizing agents
Hazardous decomposition products : In case of fire formation of carbonoxides and other toxic gases/vapors is possible.

11. Toxicological information

Toxicology tests

Acute oral toxicity : LD50 rat: > 2.000 mg/kg
Skin irritation : May cause skin irritation.
Eye irritation : Mild eye irritation
Sensitisation : None known.

General Information

Other information on toxicity : The mixture itself is not examined. The data refer to the specifications of the ingredients. Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

Other environmental data

Other data : No data is available on the product itself. The product is classified in accordance with EC directive / regulation. Do not discharge into sewerage system, surface water or soil. Adequate disposal.

13. Disposal considerations



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

Version 3.1
Revision date: 30.07.2015

Material:
Print Date 14.01.2016

- Product : In accordance with local and national regulations.
- Uncleaned packaging : Dispose of as unused product. Offer rinsed packaging material to local recycling facilities.

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

- H319 : Causes serious eye irritation.
H412 : Harmful to aquatic life with long lasting effects.

Precautionary statements

- P273 : Avoid release to the environment.
P280 : Wear protective gloves / eye protection.
P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

For footnotes, see section 16.

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



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

Version 3.1
Revision date: 30.07.2015

Material:
Print Date 14.01.2016

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



Xi : Irritant



N : Dangerous for the environment

R-phrase(s)

R51/53 : Toxic 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 2, Section 15
Deletions : Section 3



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

Version 3.1

Revision date: 30.07.2015

Material:

Print Date 14.01.2016

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.

Full text of Hazard statements mentioned in Section 3

H319 : Causes serious eye irritation.
H412 : Harmful to aquatic life with long lasting effects.

Additional advice

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

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.



authorized dealer:
Pulch + Lorenz microscopy
Am Untergrün 23, D-79232 March
tel: 07665 9272-0
fax: 07665 9272-20
mail: kontakt@pulchlorenz.de
web: pulchlorenz.de