



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Immersol(TM) M
Unique Formula Identifier (UFI) : HT10-T09X-3006-Q98R

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

Use of the Sub-stance/Mixture : Optical-precision engineering industry
Industrial and professional 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.

1.3 Details of the supplier of the safety data sheet

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
E-mail address : SDS@zeiss.com

1.4 Emergency telephone number

Poisoning Control Center : +49 551 19240 (24 hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.
Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

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

Precautionary statements : **Prevention:**

P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Octahydro-4,7-methano-1H-indene-5-methanol	57526-50-8 250-561-2 01-2120767048-48	Eye Irrit. 2; H319	60 - 70
Oxidipropyl dibenzoate	27138-31-4 248-258-5 01-2119529241-49	Aquatic Chronic 3; H412	20 - 30

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Remove and wash contaminated clothing before re-use.



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

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

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : The most important known symptoms and effects are described in section 2 and / or section 11.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No information available.
-

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry chemical
Foam
Sand
Water spray jet

- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : In case of fire formation of carbonoxides and other toxic gases/vapors is possible.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Use water spray to cool unopened containers.
Avoid extinguishing water reaching water, ground water or sewage system.
-



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
Risk of slipping because of leaked / spilled product

6.2 Environmental precautions

Environmental precautions : Prevent discharge into sewerage system, soil or aquatic environment.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material.
Clean contaminated surface thoroughly.

6.4 Reference to other sections

Adequate disposal, For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : 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.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep tightly closed in a dry and cool place. Keep away from direct insolation and heating sources.
Advice on common storage : Do not store together with food.
Do not store together with oxidizing agents.

7.3 Specific end use(s)

Specific use(s) : Apart from the uses mentioned in section 1 no other specific uses are intended.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

None.



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Avoid contact with eyes, if necessary wear eye protection.
Hand protection

Remarks : 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.

Skin and body protection : closed work clothing
Respiratory protection : Provide sufficient air exchange and/or exhaust in work rooms.
Protective measures : Take off all contaminated clothing immediately.
Wash hands before breaks and at the end of workday.
Preventive skin protection

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid
Colour : colourless
Odour : aromatic
Boiling point/boiling range : > 200 °C

Flash point : 164 °C
Method: ISO 2592

pH : Not applicable

Viscosity
Viscosity, kinematic : 339 mm²/s (20 °C)
Method: DIN 51562

263 mm²/s (23 °C)
Method: DIN 51562

Solubility(ies)
Water solubility : insoluble

Density : 1.067 g/cm³ (20 °C)
Method: DIN 51757

9.2 Other information

No data available



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

10.4 Conditions to avoid

Conditions to avoid : Heat, open flames and other sources of ignition.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if used as directed.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Components:

Octahydro-4,7-methano-1H-indene-5-methanol:

Acute oral toxicity : LD50 (Rat): 2,270 - 3,350 mg/kg
Method: OECD Test Guideline 401

Skin corrosion/irritation

Product:

Remarks : None known.

Components:

Octahydro-4,7-methano-1H-indene-5-methanol:

Species : Rabbit
Exposure time : 4 h
Method : OECD Test Guideline 404
Result : slight irritation



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

Serious eye damage/eye irritation

Product:

Remarks : Irritating to eyes.

Components:

Octahydro-4,7-methano-1H-indene-5-methanol:

Species : Rabbit
Exposure time : 24 h
Method : OECD Test Guideline 405
Result : Moderate eye irritation
Remarks : Mild eye irritation

Respiratory or skin sensitisation

Product:

Remarks : None known.

Components:

Octahydro-4,7-methano-1H-indene-5-methanol:

Species : guinea-pig
Method : OECD Test Guideline 406
Result : Not sensitizing.

Germ cell mutagenicity

Product:

Germ cell mutagenicity- Assessment : No data available

Carcinogenicity

Product:

Carcinogenicity - Assessment : No data available

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : No data available

STOT - single exposure

Product:



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

Remarks : No data available

STOT - repeated exposure

Product:

Remarks : No data available

Aspiration toxicity

Product:

No data available

11.2 Information on other hazards

Further information

Product:

Remarks : 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.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

Octahydro-4,7-methano-1H-indene-5-methanol:

Partition coefficient: n- : log Pow: 3.7 - 4.2 (25 °C)
octanol/water

12.4 Mobility in soil

No data available



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

12.5 Results of PBT and vPvB assessment

Components:

Octahydro-4,7-methano-1H-indene-5-methanol:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological information : 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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

SECTION 14: Transport information

14.1 UN number or ID number

ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable

Other regulations:

Follow Directive 94/33/EC on the protection of young people at work and its national implementations.

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.

15.2 Chemical safety assessment

Not required.

SECTION 16: Other information

Full text of H-Statements

H319 : Causes serious eye irritation.

H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

Eye Irrit. : Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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

Sources of key data used to compile the Safety Data Sheet : Reg. 1272/2008, Annex VI
TRGS 900
TRGS 903
International dangerous goods regulations
Supplier details

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.



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

Version 5.0

Immersol (TM) M

Material: 000000-0488-362

Revision date: 27.07.2023

Date of last issue: 27.07.2023

MT / EN