

IM4500

This sheet supersedes the one dated: 14.09.2010

1. Chemical Product and Company Identification

Product Data

- Trade name	Impregnation resin IM4500
- Article No	-
- Composition No	-
- Use of the Substance/Preparation	Impregnation resin to seal porous cast parts
- Manufacture's name / Supplier	Internationale Metall IMPrägnier GmbH Daimlerstrasse 12 40789 Monheim Germany
- Telephone	+49(0)2173/49985-0
- Fax	+49(0)2173/49985-20
- Respondent	+49(0)2173/49985-12
- Emergency telephone number	+49(0)2173/49985-12
- Internet	http://www.imp-sealants.de

2. Hazard Identification

- For humans (Supplementing data see section 11)	Irritations to eyes, respiratory system and skin. Longer contact may cause slight skin irritations, sensitization is possible.
- For environment	Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
- For materials	not known

3. Composition / Information on Ingredients

- Chemical name	Mixture of mono- and polyfunctional acrylate-, methacrylate- monomers
- Dangerous ingredients	methacrylicesters
- CAS-No.	not applicable
- Identification number	not applicable
- EINECS-No.	not applicable

4. First Aid Measures

- General reference	Avoid contact
- After inhalation	Take person out of the contaminated area. Remove patient to fresh air.
- After skin contact	Take off all contaminated clothing. Wash with soap and water and rinse with water.
- After eye contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- After ingestion	Wash out with water and drink a lot of water. Do NOT induce vomiting, seek immediate medical advice.
- Indications for the doctor	none
- Special equipment for the first aid	none

5. Fire Fighting Measures

- Extinguishing media	Water, carbon dioxide, foam, powder
- suitable	Water jet
- not suitable	
- Special protective equipment	Wear individual breathing apparatus. Wear suitable protective clothing, gloves and eye/face protection.

IM4500

This sheet supersedes the one dated: 14.09.2010

- **Dangerous combustion products** Carbon dioxide, carbon monoxide, methacrylic acid, acrylic acid
- **Further indications** In case of fire and/or explosion do not breathe fumes. Cool the container with sprayed water to avoid polymerisation. Eliminate hot points.

6. Accidental Release Measures

- **Personal precautions** Avoid contact. Wear protective equipment (section 8).
- **Environmental precautions** Do NOT discharge in drains and sewers. Do not allow this chemical to enter the environment. Impurity of the ground-water by the material is to be avoided. Inform authorities if major spillage occurs.
- **Cleaning methods** Spray the area with water after absorbing the greatest amount of material. Recover product by absorbing with sand, earth or vermiculite. Collect the product in a container pending future destruction.
- **Further Indications** not known

7. Handling and Storage

- **Handling** Avoid contact with skin and eyes. When using do not eat, drink or smoke.
- **Protection of fire and explosion** No special handling required.
- **Storage** Respect the advised storage time under 35°C non catalyzed resin under 25°C catalyzed resin
- **Recommendations for storage buildings and cans, drums or containers** Make sure of the presence of air and inhibitor in the drums or containers. Do not overfill cans, drums or containers (max. 90%). Keep only in the original container at temperature not exceeding 35°C. Keep in tightly closed containers and keep container dry. Avoid direct sunlight, UV radiation and strong oxidizers.
- **To Avoid: Incompatible Materials** Keep container away from oxidizing materials, acids, bases.
- **Further recommendations for storage conditions** Do NOT keep under inert gas (nitrogen, ...).
- **Storage class** 11 (VCI-Concept)

8. Exposure Controls / Personal Protection

- **Recommendation for plants** Good ventilation. Provide Protection equipment in accordance with point "**Protective equipment**"
- **Further recommendations** none
- **Protective equipment (General preventive and hygiene measures)** Avoid contact with skin and eyes. Take off all contaminated clothing. When using do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
- **Inhalation protection** Local ventilation is recommended.
- **Skin and hand protection** Do not use natural rubber gloves. Wear nitrile gloves (thickness>0.5 mm). Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility, etc) is noticed.
- **Eye protection** Wear a face-shield or chemical goggles.
- **Body protection** Wear protective clothing.

IM4500

This sheet supersedes the one dated: 14.09.2010

9. Physical and Chemical Properties

- Appearance	liquid
- Color	yellow
- Odour	ester-like
- Change of Conditions	
- Melting point	not known
- Boiling point	66°C at 1,33mbar
- Flash point	102°C DIN 51758
- Ignition temperature	not applicable
- Explosion	no danger of explosion
- Vapor pressure	0.1mbar at 20°C, 1,3 mbar at 66°C
- Density	0,94 g/ml ± 0,01 g/ml at 20°C
- Solubility in water	100 g/l at 20°C
- Solubility in organic solvents	completely soluble in most organic solvents
- pH-Value	6 - 7 10 g/l
- Viscosity	10 mPas ± 1 mPas at 20 °C

10. Stability and Reactivity

- Stability	Stable under normal storage condition (section 7).
- Conditions to avoid	Direct UV/sunlight, strong heat, absence of oxygen
- Dangerous reaction with	Strong oxidizing agents (e.g. peroxides). Concentrated bases and acids. Free radical initiators.
- Hazardous decomposition products	No hazardous products under according regulation usage. By thermal decomposition, risk of formation of acid fumes, carbon monoxide and carbon dioxide. Toxic substances.
- Hazardous Polymerization	Polymerization may occur with the development of strong heat.

11. Toxicological Information

- Acute toxicity data	
- Inhalation (LC ₅₀ Rat, [mg / l / 4h])	unavailable
- Ingestion (LC ₅₀ Rat, [mg / kg])	11200
- Skin contact (LC ₅₀ Rat, [mg / kg])	unavailable
- Caustic effect (Skin / Eye)	Irritations to eyes and skin.
- Sensitization	Sensitization by skin contact possible.
Sub acute / chronic toxicity data	
- Carcinogenic	unavailable
- Mutagenic	unavailable
- Teratogenic	unavailable
- Narcotic effect	unavailable
Experiences from the practice	
- Observations for classification	none
- Other observations	none
- General remarks	Classification according to method of calculation.

12. Ecological Information

- Ecotoxic effect, aqua toxic effect	No data available
- Behaviour in the compartments of the environment.	No data available
- Information on elimination	May cause long-term adverse effects in the aquatic environment.

IM4500

This sheet supersedes the one dated: 14.09.2010

- | | |
|------------------------------------|----------------------------------|
| - Further information's on ecology | Fast degradable |
| CSB - Value, mg/g | Not available |
| BSB ₅ - Value, mg/g | Not available |
| AOX - indication | Product does not contain halogen |
| Significant components | Dodecylmethacrylate |
| Other harmful effects | none |

13. Disposal Consideration

- Product: Resin polymerized
 - EWC-Code 17 02 03
 - Name Plastics
 - Disposal recommendation normal waste
- Product: Resin liquid (not polymerized)
 - EWC-Code 20 01 27
 - Name Paints, Printing-colours, Glue and Plastics
 - Disposal recommendation Special waste, elimination by combustion recommended.
- Dirty package Return empty and cleaned plastic drums, cans and containers back to IMP.
- Further recommendations none

14. Transport information

- Land transport (Classification ADR and RID) Remarks	Class	Classification code	Packaging group	Code danger	UN-No
	9	M6	III	90	3082
- Information's for transport documents and packaging					
- Volume or Mass					
- up to 5 l per inner packaging and 30 kg per parcel		Name and description UN 3082 Dangerous good for environment, liquid, n.o.s. (contains Dodecylmethacrylate)	Etiquette n.a.	Packaging Code or instruction -/4G	
- IBC etc.		UN 3082 Dangerous good for environment, liquid, n.o.s. (contains Dodecylmethacrylate)	9	3H1/Z	
- Transport by inland waterway (Classification ADNR)	Classification was not made.				
- Sea transport (Classification IMDG) Remarks	Class 9	UN-No 3082	Packaging group III		
- EmS-No.	F-A, S-F				
- Marine pollutant	yes				
- Instructions for responsible statement and labelling	Dangerous good for environment, liquid, n.o.s. (contains Dodecylmethacrylate)				
Name of the exact transport	Environmentally hazardous & marine pollutant				
Etiquette	None				
Remarks	None				

IM4500

This sheet supersedes the one dated: 14.09.2010

- Air transport (Classification IATA - DGR / ICAO - TI)	Class	UN-No	Packaging group
	9	3082	III
- Instructions for responsible statement and labelling	Environmentally hazardous substance, liquid, n.o.s. (contains: Dodecylmethacrylate)		
- Name of the exact transport	Environmentally hazardous		
- Etiquette	Passenger	Cargo	
- Note of packaging plane	914	914	
- Remarks	none		

15. Regulatory Information

- Classified according to EEC directives	The product is classified as an irritant by EEC regulations of dangerous products. Exceptions are applicable.
- Letter of classification	 
- R-Sentences	Xi - irritant N - dangerous for the environment R 36/37/38 - Irritation to eyes, respiratory system and skin. R 43 - Sensitization is possible. R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S-Sentences	S 2 - Keep out of reach of children. S 26 - In case of contact with eyes rinse immediately with plenty of water and seek medical advice. S 28 - After contact with skin wash with water and soap S 37/39 Wear suitable gloves and eye/face protection. S 60 - This material and/or its container must be disposed of as hazardous waste S 61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.
- National regulations	
- VbF	not applicable
- Air pollution regulations	not classified
- TA-Air	
- Class; No; Amount m%	Class II; 5.2.5; 50-70
- Water pollution class	2

16. Other Information

The information above is believed to be correct but does not purpose to be all inclusive and shall only be used as a guide. IMP shall not be held liable for any damage resulting from the handling or from contact with the above material.

- Contact person: Dr. Tolksdorf