

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

### 1.1 Product identifier

Trade name : HEKAPUR Fast Cast Resin M4 Component A

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

Use of the Substance/Mixture : Casting Resin

### 1.3 Details of the supplier of the safety data sheet

Exact Plastics GmbH                      Phone: +49 (0) 5144 4955648  
Genossenschaftsstr. 12                Fax: +49 (0) 5144 4955649  
D-29356 Bröckel                        E-Mail: info@exact-plastics-gmbh.de

### 1.4 Emergency telephone number

+49 (0) 5144 4955648

---

## 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.
Aspiration hazard , Category 1	H304: May be fatal if swallowed and enters airways.
Chronic aquatic toxicity , Category 2	H411: Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)



Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H304                      May be fatal if swallowed and enters airways. H319                      Causes serious eye irritation. H411                      Toxic to aquatic life with long lasting effects.

---



Precautionary statements : **Prevention:**  
P273 Avoid release to the environment.  
P280 Wear eye protection/ face protection.  
**Response:**  
P301 + P310 IF SWALLOWED: Immediately call a  
POISON CENTER/doctor.  
P331 Do NOT induce vomiting.  
P337 + P313 If eye irritation persists: Get medical advice/  
attention.  
P391 Collect spillage.

Hazardous components which must be listed on the label:  
bis(isopropyl)naphthalene

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Polyether/polyester polyol based mixture

#### Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
bis(isopropyl)naphthalene	38640-62-9 254-052-6	Asp. Tox.1; H304 Aquatic Chronic1; H410	>= 20 - < 25
Polyether Polyol	25214-63-5  01-2119471485-32- 0002	Eye Irrit.2; H319	>= 12,5 - < 20
distillates (petroleum), hydrotreated light	64742-47-8 265-149-8 /	Asp. Tox.1; H304	>= 10 - < 12,5
Polypropylene glycol	25322-69-4 /	Acute Tox.4; H302	>= 5 - < 7

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Keep warm and in a quiet place.  
Show this safety data sheet to the doctor in attendance.  
Take off all contaminated clothing immediately.

- If inhaled : Move to fresh air.  
Keep patient warm and at rest.  
If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.  
Do NOT use solvents or thinners.  
If on clothes, remove clothes.  
If skin irritation persists, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,  
for at least 15 minutes.  
If eye irritation persists, consult a specialist.  
If easy to do, remove contact lens, if worn.
- If swallowed : Keep at rest.  
Do not induce vomiting without medical advice.  
Keep respiratory tract clear.  
If symptoms persist, call a physician.

#### **4.2 Most important symptoms and effects, both acute and delayed**

- Symptoms : irritant effects  
Lachrymation  
Redness

#### **4.3 Indication of any immediate medical attention and special treatment needed**

- Treatment : The first aid procedure should be established in consultation  
with the doctor responsible for industrial medicine.

---

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

- Suitable extinguishing media : Foam  
Sand  
Carbon dioxide (CO<sub>2</sub>)  
Water mist

- Unsuitable extinguishing media : Water spray jet

#### **5.2 Special hazards arising from the substance or mixture**

- Specific hazards during firefighting : The pressure in sealed containers can increase under the  
influence of heat.  
Cool closed containers exposed to fire with water spray.

#### **5.3 Advice for firefighters**

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.
-

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Immediately evacuate personnel to safe areas.  
Prevent fire extinguishing water from contaminating surface water or the ground water system.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

---

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Refer to protective measures listed in sections 7 and 8.  
Evacuate personnel to safe areas.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or drains.

### **6.2 Environmental precautions**

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.  
Try to prevent the material from entering drains or water courses.  
Local authorities should be advised if significant spillages cannot be contained.

### **6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Pick up and transfer to properly labelled containers.

### **6.4 Reference to other sections**

For personal protection see section 8.

---

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.  
Avoid inhalation, ingestion and contact with skin and eyes.  
Wear personal protective equipment.

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : Provide adequate ventilation. Wash hands and face before breaks and immediately after handling the product.

---

## Safety Data Sheet

according to Regulation (EU) No. 1907/2006

HEKAPUR Fast Cast Resin M4 Component A

Revision Date: 2019-01-15    Print Date: 2019-01-18

Version: 2-0    Page: 5 / 15



### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. To maintain product quality, do not store in heat or direct sunlight.
- Advice on common storage : Keep product and empty container away from heat and sources of ignition.  
Keep away from food and drink.
- Other data : Stable at normal ambient temperature and pressure.

### 7.3 Specific end use(s)

- Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

---

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

- bis(isopropyl)naphthalene : End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Long-term systemic effects  
Value: 2,1 mg/kg  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects  
Value: 2,1 mg/kg  
End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects  
Value: 4,3 mg/kg  
End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 7,4 mg/m<sup>3</sup>  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 30 mg/m<sup>3</sup>
- Polyether Polyol : End Use: Workers  
Exposure routes: Skin contact  
Value: 13,9 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Value: 98 mg/m<sup>3</sup>

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

- bis(isopropyl)naphthalene : Sewage treatment plant  
Value: 0,15 mg/l
-

Fresh water  
Value: 0,00026 mg/l  
Marine water  
Value: 0,000026 mg/l  
Fresh water sediment  
Value: 0,94 mg/kg  
Marine sediment  
Value: 0,094 mg/kg  
Soil  
Value: 0,19 mg/kg

## 8.2 Exposure controls

### Engineering measures

Effective exhaust ventilation system  
effective ventilation in all processing areas

### Personal protective equipment

- Eye protection : Do not wear contact lenses.  
Safety glasses with side-shields conforming to EN166  
Ensure that eyewash stations and safety showers are close to the workstation location.
- Hand protection  
Material : Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.
- Skin and body protection : Protective suit
- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. In the case of vapour formation use a respirator with an approved filter.  
Respirator with a vapour filter (EN 141)  
Apply technical measures to comply with the occupational exposure limits.  
This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
- Protective measures : Avoid contact with skin.  
Wear suitable protective equipment.

---

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : coloured
- Odour : slight
- Odour Threshold : not determined
-

pH	:	not determined
Melting point/freezing point	:	Not applicable
Boiling point/boiling range	:	> 200 °C
Flash point	:	100 °C Evaporation
rate	:	not determined
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Vapour pressure	:	Not applicable
Relative vapour density	:	not determined
Density	:	1,04 g/cm <sup>3</sup> (25 °C)
Bulk density	:	not determined
Solubility(ies)	:	
Solubility in other solvents	:	not determined
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	Not applicable
Thermal decomposition	:	Method: No data available
Viscosity	:	
Viscosity, dynamic	:	90 - 180 mPa.s (25 °C)
Viscosity, kinematic	:	not determined
Explosive properties	:	Not applicable
Oxidizing properties	:	Not applicable

## 9.2 Other information

Surface tension	:	not determined
Sublimation point	:	Not applicable



---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage conditions.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with the following substances:  
Isocyanates  
Keep away from oxidizing agents, and acidic or alkaline products.

### 10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

### 10.5 Incompatible materials

Materials to avoid : Incompatible with oxidizing agents.

### 10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if stored and applied as directed.

---

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### **Product:**

Acute oral toxicity : Acute toxicity estimate : > 2.000 mg/kg  
Method: Calculation method

##### **Components:**

##### **bis(isopropyl)naphthalene:**

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,64 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 4.000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

##### **distillates (petroleum), hydrotreated light:**

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 401

---



## Safety Data Sheet

according to Regulation (EU) No. 1907/2006

HEKAPUR Fast Cast Resin M4 Component A

Revision Date: 2019-01-15    Print Date: 2019-01-18

Version: 2-0    Page: 9 / 15



GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): 4,951 mg/l  
Exposure time: 4 h  
Method: OECD Test Guideline 403  
GLP: yes

Acute dermal toxicity : LD50 (Rabbit, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

### Skin corrosion/irritation

#### **Product:**

Remarks: No data available

#### **Components:**

##### **bis(isopropyl)naphthalene:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation  
GLP: yes

##### **distillates (petroleum), hydrotreated light:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation  
GLP: yes

### Serious eye damage/eye irritation

#### **Product:**

Remarks: No data available

#### **Components:**

##### **bis(isopropyl)naphthalene:**

Species: Rabbit  
Method: OECD Test Guideline 405  
Result: No eye irritation  
GLP: yes

### Respiratory or skin sensitisation

#### **Product:**

Remarks: No data available

#### **Components:**

##### **bis(isopropyl)naphthalene:**

Test Type: Maximisation Test  
Exposure routes: Dermal  
Species: Guinea pig  
Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.  
GLP: yes

**Germ cell mutagenicity**

**Carcinogenicity**

**Reproductive toxicity**

**STOT - single exposure**

**Product:**

Remarks: Not applicable

**STOT - repeated exposure**

**Repeated dose toxicity**

**Product:**

Remarks: No data available

**Aspiration toxicity**

**Further information**

**Product:**

Remarks: No data available

---

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

**Components:**

**bis(isopropyl)naphthalene:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 0,5 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: Directive 67/548/EEC, Annex V, C.1.  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,7 mg/l  
Exposure time: 48 h  
Test Type: semi-static test  
Method: OECD Test Guideline 202  
GLP: yes

---

## Safety Data Sheet

according to Regulation (EU) No. 1907/2006

HEKAPUR Fast Cast Resin M4 Component A

Revision Date: 2019-01-15    Print Date: 2019-01-18

Version: 2-0    Page: 11 / 15



Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,013 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Test Type: semi-static test

### distillates (petroleum), hydrotreated light:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l  
Exposure time: 48 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1.000 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202  
GLP: yes

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: yes

## 12.2 Persistence and degradability

### Product:

Biodegradability : Remarks: No data available

### Components:

#### bis(isopropyl)naphthalene:

Biodegradability : Test Type: aerobic  
Result: Not readily biodegradable.  
Method: OECD Test Guideline 310  
GLP: yes

#### distillates (petroleum), hydrotreated light:

Biodegradability : Test Type: aerobic  
Result: Readily biodegradable  
Method: OECD Test Guideline 301F  
GLP: yes

## 12.3 Bioaccumulative potential

### Product:

Bioaccumulation : Remarks: No data available

### Components:

#### bis(isopropyl)naphthalene:

Bioaccumulation : Species: Cyprinus carpio (Carp)  
Bioconcentration factor (BCF): > 500

Method: OECD Test Guideline 305  
GLP: yes

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

#### 12.6 Other adverse effects

**Product:**

Additional ecological information : Remarks: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

---

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Product : In accordance with local and national regulations.  
Container hazardous when empty.  
Do not dispose of with domestic refuse.  
Do not mix waste streams during collection.

Contaminated packaging : Empty containers should be taken to local recyclers for disposal.

---

### SECTION 14: Transport information

#### 14.1 UN number

ADR/RID/ADN : UN 3082

IMDG : UN 3082

IATA : UN 3082

#### 14.2 UN proper shipping name

ADR/RID/ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Bis(isopropyl)naphthalene isomers)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Bis(isopropyl)naphthalene isomers)

IATA : Environmentally hazardous substance, liquid, n.o.s.  
(Bis(isopropyl)naphthalene isomers)

---

#### 14.3 Transport hazard class(es)

<b>ADR/RID/ADN</b>	:	9
<b>IMDG</b>	:	9
<b>IATA</b>	:	9

#### 14.4 Packing group

<b>ADR/RID/ADN</b>	:	
Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
Remarks	:	ADR: These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

<b>IMDG</b>	:	
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Remarks	:	IMDG: Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting the criteria for inclusion in another hazard class all provisions of this Code relevant to any additional hazards continue to apply.

IMDG Code segregation group - none

<b>IATA</b>	:	
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Packing group	:	III
Labels	:	9
Remarks	:	IATA: These substances when transported in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

#### 14.5 Environmental hazards

---

**ADR/RID/ADN**

Environmentally hazardous : yes

**IMDG**

Marine pollutant : yes

**14.6 Special precautions for user**

Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

---

**SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Xylene, mixture of isomers  
iso-butanol

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL HAZARDS	200 t	500 t
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils	2.500 t	25.000 t

**15.2 Chemical safety assessment**

Not applicable

---

**SECTION 16: Other information**

**Full text of H-Statements**

H302 : Harmful if swallowed.

---

## Safety Data Sheet

according to Regulation (EU) No. 1907/2006

HEKAPUR Fast Cast Resin M4 Component A

Revision Date: 2019-01-15    Print Date: 2019-01-18

Version: 2-0    Page: 15 / 15



- H304 : May be fatal if swallowed and enters airways.
- H319 : Causes serious eye irritation.
- H410 : Very toxic to aquatic life with long lasting effects.

### Full text of other abbreviations

- Acute Tox. : Acute toxicity
- Aquatic Chronic : Chronic aquatic toxicity
- Asp. Tox. : Aspiration hazard
- Eye Irrit. : Eye irritation

### Further information

- Training advice : Provide adequate information, instruction and training for operators.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

