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

1.1. Product identifier
HistoResin M.M

Further trade names
14702231799

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

Use of the substance/mixture
plastic

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Nussloch GmbH
Street: Heidelberger Str. 17-19
Place: D Nussloch
Telephone: +49 (0)6224/143-0
Responsible Department:
Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number:
INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hazard categories:
Flammable liquid: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.

2.2. Label elements

Hazardous components which must be listed on the label
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
Signal word: Danger
Pictograms: GHS02-GHS07

Hazard statements
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P243 Take precautionary measures against static discharge.
P403 Store in a well-ventilated place.
P501 Dispose of contents/container to in accordance with local and national regulations.
2.3. Other hazards
No data available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures
Chemical characterization
Preparation based on polymethacrylate

Hazardous components

<table>
<thead>
<tr>
<th>EC No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate</td>
<td>&gt;90 %</td>
</tr>
<tr>
<td></td>
<td>Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3: H225 H315 H317 H335</td>
<td></td>
</tr>
<tr>
<td>607-035-00-6</td>
<td>N,N-dimethyl-p-toluidine</td>
<td>0-5 %</td>
</tr>
<tr>
<td>612-056-00-9</td>
<td>Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT RE 2, Aquatic Chronic 3: H301 H311 H331 H373 H412</td>
<td></td>
</tr>
</tbody>
</table>

Full text of R, H and EUH phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Symptoms of poisoning may not occur for many hours, therefore keep under medical supervision for at least 48 hours.

After inhalation
Ensure of fresh air.
If symptoms persist, call a physician.

After contact with skin
Immediately wash with water and soap and rinse thoroughly.

After contact with eyes
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

After ingestion
Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed
No data available.

4.3. Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Carbon dioxide (CO2), Sand, Dry powder

 Unsuitable extinguishing media
water

5.2. Special hazards arising from the substance or mixture
The formation of toxic gases is possible during heating or in case of fire (for example: carbon monoxide and traces of incompletely burned hydrocarbons).
5.3. Advice for firefighters
In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protection equipment.
Get unprotected persons to safety.

6.2. Environmental precautions
Inform competent authority about release into the sewage, ground or into waters.

6.3. Methods and material for containment and cleaning up
Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

6.4. Reference to other sections
Observe protective instructions (see Sections 7 and 8).
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Keep container tightly closed.
Provide appropriate ventilation and exhaust ventilation at the workplaces.

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 rooms and vessels
Keep container tightly closed in a cool place

Advice on storage compatibility
Not required.

Further information on storage conditions
Store in cool, dry place in tightly closed containers.

7.3. Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>50</td>
<td>208</td>
<td></td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>416</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Protective and hygiene measures
Keep away from food, drink and animal feeding stuffs.
Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday.
Avoid contact with the skin and the eyes.

Eye/face protection
Not required.

Hand protection
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also
on further marks of quality and varies from manufacturer to manufacturer.
The exact break through time has to be found out by the manufacturer of the protective gloves.
Chemical safety gloves made of butyl or nitrile rubber of category III according to EN 374.
Skin protection
Light protective clothing ..
Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: Colourless
Odour: characteristic

Changes in the physical state
Initial boiling point and boiling range: 100 °C
Flash point: 10 °C
Lower explosion limits: 2.1 vol. %
Upper explosion limits: 12.5 vol. %
Vapour pressure: 47 hPa
(at 20 °C)
Density (at 20 °C): 0.940 g/cm³
Ignition temperature: 430 °C
Explosive properties The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Viscosity / dynamic:
(at 20 °C) 1 mPa·s

9.2. Other information
No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No decomposition if stored and applied as directed.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No hazardous reactions known.

10.4. Conditions to avoid
No data available.

10.5. Incompatible materials
No data available.

10.6. Hazardous decomposition products
None

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity
Based on available data, the classification criteria are not met.
methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate
CAS-No. 80-62-6
LD50/oral/rat: > 5000 mg/kg
LD50/dermal/rabbit: > 5000 mg/kg
LC50/inhalation: 29.8 mg/l(4h)(Rat )

N,N-dimethyl-p-toluidine 99-97-8
LD50/oral/rat: 500 mg/kg
LC50/inhalation: 1400 mg/l(4h)

Irritation and corrosivity
Causes skin irritation.

Sensitising effects
May cause an allergic skin reaction. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

STOT-single exposure
May cause respiratory irritation. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

Severe effects after repeated or prolonged exposure
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

Aspiration hazard
Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity
N,N-dimethyl-p-toluidine 99-97-8
LC50 (96h)/Fish: 100 mg/l

12.2. Persistence and degradability
No data available.

12.3. Bioaccumulative potential
No data available.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
Not applicable

12.6. Other adverse effects
No data available.

Further information
Product is not allowed to discharge into the ground water or aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Advice on disposal
Should not be disposed of with household waste.
Do not discharge into the drains/surface waters/ground water.

Waste disposal number of waste from residues/unused products
110198 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); other wastes containing dangerous substances
Classified as hazardous waste.
Contaminated packaging
Waste disposal according to local regulations.

SECTION 14: Transport information

Land transport (ADR/RID)
14.1. UN number: UN 1247
14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Classification code: F1
Limited quantity: 1 L
Transport category: 2
Hazard No: 339
Tunnel restriction code: D/E

Inland waterways transport (ADN)
14.1. UN number: UN 1247
14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Classification code: F1
Limited quantity: 1 L

Marine transport (IMDG)
14.1. UN number: UN 1247
14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

Special Provisions: -
Limited quantity: 1 L
EmS: F-E, S-D

Air transport (ICAO)
14.1. UN number: UN 1247
14.2. UN proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3
Limited quantity Passenger: 1 L
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user
Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
National regulatory information
Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment
For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Changes
Changes in chapter: -

Abbreviations and acronyms
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
DOT = Department of Transportation
TDG = Transport of Dangerous Goods

GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative
LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Relevant H- and EUH-phrases (Number and full text)
H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)