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

1.1. Product identifier
HistoResin Activator

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

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:
Oxidising solid: Ox. Sol. 1
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Reproductive toxicity: Repr. 2
Hazardous to the aquatic environment: Aquatic Acute 1
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Heating may cause a fire.
Causes serious eye irritation.
May cause an allergic skin reaction.
Suspected of damaging fertility.
Toxic to aquatic life with long lasting effects.

2.2. Label elements
Hazardous components which must be listed on the label
Dibenzoyl peroxide
Dicyclohexyl-phthalate

Signal word: Danger
Pictograms: GHS03-GHS07-GHS08-GHS09

Hazard statements
H242 Heating may cause a fire.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H361f Suspected of damaging fertility.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P220 Keep/Store away from Reducing agents. Acids, alkalies.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P235 Keep cool.
P233 Keep container tightly closed.
P273 Avoid release to the environment.
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
No data available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>EC No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>202-327-6</td>
<td>Dibenzoyl peroxide</td>
<td>25 - 50%</td>
</tr>
<tr>
<td>94-36-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>617-008-00-0</td>
<td>Org. Perox. B, Eye Irrit. 2, Skin Sens. 1, Aquatic Acute 1; H241 H319 H317 H400</td>
<td></td>
</tr>
<tr>
<td>201-545-9</td>
<td>Dicyclohexyl-phthalate</td>
<td>25 - 50%</td>
</tr>
<tr>
<td>84-61-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01-2119978223-34</td>
<td>Repr. 2, Skin Sens. 1, Aquatic Chronic 3; H361f H317 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

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
Rinse out mouth and give plenty of water to drink. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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
Foam, carbon dioxide (CO2), dry chemical, water-spray

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
No specific precautions required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Not required.

6.2. Environmental precautions
No specific precautions required.
6.3. Methods and material for containment and cleaning up
Take up mechanically.

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
No specific precautions required.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep in closed original container.

Advice on storage compatibility
Keep away from acids, bases, heavy metal salts and reducing agents.

Further information on storage conditions
Keep in a cool place.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<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>94-36-0</td>
<td>Dibenzoyl peroxide</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td>84-61-7</td>
<td>Dicyclohexyl phthalate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Protective and hygiene measures
Avoid contact with the skin and the eyes.
Wash hands before breaks and at the end of workday.
Remove and wash contaminated clothing before re-use.

Eye/face protection
During transferring safety goggles are recommended.
Safety goggles with side protection (EN 166).

Hand protection
Chemical safety gloves made of butyl or nitrile rubber of category III according to EN 374.
Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on futher 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.

Skin protection
Light protective clothing

Respiratory protection
Not required.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Powder
Colour: White
Odour: faint, characteristic

Changes in the physical state

Melting point: n.d.
Initial boiling point and boiling range: n.d.
Flash point: n.a.
Density: 1.23 g/cm³
Water solubility: insoluble
Ignition temperature: 380 °C

Explosive properties

The product is considered non-explosive; nevertheless explosive dust/air mixture can be generated

Decomposition temperature: 55 °C SADT
Oxidizing properties
May cause fire.

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
Reactions with amines. Reactions with reducing agents, heavy metals.

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.
Dicyclohexyl-phthalate
CAS-No. 94-36-0
LD50/oral/rat: 5000 mg/kg
LC50/inhalation/rat: 24300 mg/l (4h)

Dibenzoyl peroxide
CAS-No. 84-61-7
LD50/oral/rat: 30000 mg/kg

Irritation and corrosivity
Causes serious eye irritation.
**Sensitising effects**
May cause an allergic skin reaction. (Dibenzoyl peroxide), (Dicyclohexyl-phthalate)

**STOT-single exposure**
Based on available data, the classification criteria are not met.

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

**Carcinogenic/mutagenic/toxic effects for reproduction**
Suspected of damaging fertility. (Dicyclohexyl-phthalate)

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

---

**SECTION 12: Ecological information**

**12.1. Toxicity**
Dicyclohexyl-phthalate
CAS-No. 94-36-0
EC50 (48h) > 2 mg/l (Daphnia magna)
EC50 (72h) > 2 mg/l (Algae)
LC50 (96h) > 2 mg/l (Fish)

**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.

---

**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**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>110198</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Contaminated packaging**
Empty containers should be taken for local recycling, recovery or waste disposal.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Packaging that cannot be cleaned should be disposed of like the product.

---

**SECTION 14: Transport information**

**14.1. UN number:**
UN 3106

**14.2. UN proper shipping name:**
ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide 50%)

**14.3. Transport hazard class(es):**
5.2

**14.4. Packing group:**
-

Hazard label: 5.2
Classification code: P1
Limited quantity: 500 g
Transport category: 2
Tunnel restriction code: D

Inland waterways transport (ADN)
14.1. UN number: UN 3106
14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide 50%)
14.3. Transport hazard class(es): 5.2
14.4. Packing group: -
Hazard label: 5.2

Marine transport (IMDG)
14.1. UN number: UN 3106
14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide 50%)
14.3. Transport hazard class(es): 5.2
14.4. Packing group: -
Hazard label: 5.2

Limited quantity: 500 g
EmS: F-J, S-R

Air transport (ICAO)
14.1. UN number: UN 3106
14.2. UN proper shipping name: ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide 50%)
14.3. Transport hazard class(es): 5.2
14.4. Packing group: -
Hazard label: 5.2

Limited quantity Passenger: Forbidden
IATA-packing instructions - Passenger: 570
IATA-max. quantity - Passenger: 5 kg
IATA-packing instructions - Cargo: 570
IATA-max. quantity - Cargo: 10 kg

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: yes

14.6. Special precautions for user
No specific precautions required.
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

National regulatory information

Watercontaminatingclass(D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not 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)

H241 Heating may cause a fire or explosion.
H242 Heating may cause a fire.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H361f Suspected of damaging fertility.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
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.)