Safety Data Sheets

Bond Oracle HER2 IHC Detection System

Catalog No: TA9145

SDS

- Peroxide Block
- HER2 Negative Control
- HER2 Primary Antibody
- Post Primary Polymer
- DAB Part 1
- DAB Part B
- Hematoxylin

Hyperlinks

EN

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SDS Expiry Date: 18 NOV 2022

MSDS Front Page TA9145 MSDS 08/JAN/2021
SAFETY DATA SHEET
PEROXIDE BLOCK

Compilation date: 20/DEC/2020
Revision No: 4

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

1.1. Product identifier

Product name: PEROXIDE BLOCK

REACH Registration Number: Registration numbers are not available for some or all of the substance ingredients of this mixture as the substance(s) or its uses are exempt from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Use of substance / mixture: Use in laboratories - Professional.

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Newcastle Ltd
Balliol Business Park West
Benton Lane
Newcastle Upon Tyne
NE12 8EW
United Kingdom

Tel: +44 191 2150567
Fax: +44 191 2151152
Email: msds@LeicaBiosystems.com

1.4. Emergency telephone number

*Emergency tel: USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
For emergency calls only.

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: This product has no classification under CHIP.
Classification under CLP: This product has no classification under CLP.

2.2. Label elements

Label elements: This product has no label elements.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients: HYDROGEN PEROXIDE SOLUTION

<table>
<thead>
<tr>
<th>EC</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>231-765-0</td>
<td>7722-84-1</td>
<td>-; R5; O; R8; Xn: R20/22; C: R35</td>
<td>Ox. Liq. 1: H271; Acute Tox. 4: H332; Acute Tox. 4: H302; Skin Corr. 1A: H314</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

[cont...]
Section 4: First aid measures

4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** Wash out mouth with water.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours.

4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

**Delayed / immediate effects:** No data available.

4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.

[cont...]
Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients: HYDROGEN PEROXIDE SOLUTION

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>Respirable dust:</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8 hour TWA</td>
</tr>
<tr>
<td>UK</td>
<td>1.4 mg/m³</td>
</tr>
<tr>
<td>IE</td>
<td>1.5 mg/m³</td>
</tr>
<tr>
<td>US</td>
<td>1.4 mg/m³</td>
</tr>
<tr>
<td>CA</td>
<td>1.4 mg/m³</td>
</tr>
<tr>
<td>AU</td>
<td>1.4 mg/m³</td>
</tr>
<tr>
<td>NZ</td>
<td>-</td>
</tr>
</tbody>
</table>

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Odourless

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available.

Boiling point/range°C: No data available.

Melting point/range°C: * No data available.
SAFETY DATA SHEET
PEROXIDE BLOCK

Flammability limits %: lower: No data available.
upper: No data available.
Flash point°C: No data available.
Part.coeff. n-octanol/water: No data available.
Autoflammability°C: No data available.
Vapour pressure: No data available.
Relative density: No data available.
pH: No data available.
VOC g/l: No data available.

9.2. Other information
Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity
Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability
Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid
Conditions to avoid: Heat.

10.5. Incompatible materials
Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products
Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects
Toxicity values:
* Hazardous ingredients:

HYDROGEN PEROXIDE

<table>
<thead>
<tr>
<th>ORL</th>
<th>MUS</th>
<th>LD50</th>
<th>2</th>
<th>gm/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>LD50</td>
<td>376</td>
<td>mg/kg</td>
</tr>
<tr>
<td>SKN</td>
<td>RAT</td>
<td>LD50</td>
<td>4060</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure
Skin contact: There may be mild irritation at the site of contact.
Eye contact: There may be irritation and redness.
Ingestion: There may be irritation of the throat.
Inhalation: No symptoms.
Delayed / immediate effects: No data available.
Other information: Not applicable.

[cont...]
## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

- **Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.
- **Recovery operations:** Not applicable.
- **Disposal of packaging:** Clean with water. Dispose of as normal industrial waste.
- **NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

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

**Specific regulations:** This is not a mandated safety data sheet.

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.
Section 16: Other information

Other information:

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3:

H271: May cause fire or explosion; strong oxidiser.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H332: Harmful if inhaled.
R5: Heating may cause an explosion.
R8: Contact with combustible material may cause fire.
R20/22: Harmful by inhalation and if swallowed.
R35: Causes severe burns.

Legal disclaimer:
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
SAFETY DATA SHEET
HER2 NEGATIVE CONTROL ANTIBODY

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

1.1. Product identifier

Product name: HER2 NEGATIVE CONTROL ANTIBODY

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

Use of substance / mixture: Use in laboratories - Professional.

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Newcastle Ltd
Balliol Business Park West
Benton Lane
Newcastle Upon Tyne
NE12 8EW
United Kingdom
Tel: +44 191 2150567
Fax: +44 191 2151152
Email: mds@LeicaBiosystems.com

1.4. Emergency telephone number

Emergency tel: USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
For emergency calls only.

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: * Skin Sens. 1A: H317

Most important adverse effects: * May cause an allergic skin reaction.

2.2. Label elements

Label elements:

Hazard statements: * H317: May cause an allergic skin reaction.

Hazard pictograms: * GHS07: Exclamation mark

Signal words: * Warning

Precautionary statements: * P261: Avoid breathing mist.
* P272: Contaminated work clothing should not be allowed out of the workplace.
* P280: Wear protective gloves/protective clothing/eye protection.

[cont...]
Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: * Remove casualty from exposure ensuring one’s own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Delayed effects can be expected after long-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: * Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

[cont...]

Section 3: Composition/information on ingredients

3.2. Mixtures

* Hazardous ingredients: 0.035% 2-methylisothiazol-3(2H)-one.

<table>
<thead>
<tr>
<th>*EINECS</th>
<th>*CAS</th>
<th>*PBT / WEL</th>
<th>*CLP Classification</th>
<th>*Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>*220-239-6</td>
<td>*2662-20-4</td>
<td>–</td>
<td>*Acute Tox. 3 (Oral) H301, Acute Tox. 3 (Dermal) H311, Acute Tox. 2 (Inhalation) H330, Skin Corr. 1B H314, Skin Sens. 1A H317 C ≥0.0015%, Eye Dam. 1 H318, STOTS3 H335 (Lungs), Aquatic Acute 1 H400 M-Factor 10, Aquatic Chronic 1 H410 M-Factor 1.</td>
<td>*0.035%</td>
</tr>
</tbody>
</table>

* REACH Registration Number: 01-2120764690-50-XXXX.

Non-classified ingredients: ALBUMINS, BLOOD SERUM

<table>
<thead>
<tr>
<th>EC</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>232-936-2</td>
<td>9048-46-8</td>
<td>Acute Tox. 4 (H302)</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

REACH Registration Number: Not applicable.
5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

**Reference to other sections:** * Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

**Handling requirements:** * Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

**Suitable packaging:** Not applicable.

7.3. Specific end use(s)

**Specific end use(s):** Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

**Workplace exposure limits:** No data available.

DNEL/PNEC Values
SAFETY DATA SHEET
HER2 NEGATIVE CONTROL ANTIBODY

*Hazardous ingredients:

*2-methylisothiazol-3(2H)-one

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>21 µg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (acute/short term)</td>
<td>43 µg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>21 µg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (acute/short term)</td>
<td>43 µg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral (repeated dose)</td>
<td>27 µg/kg bw/day</td>
<td>General Population</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral (acute/short term)</td>
<td>53 µg/kg bw/day</td>
<td>General Population</td>
<td>Systemic</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Engineering measures:  * Ensure there is sufficient ventilation of the area.
Respiratory protection:  * Respiratory protection not required.
   Hand protection:  * Impermeable gloves.
   Eye protection:  Safety glasses. Ensure eye bath is to hand.
   Skin protection:  * Impermeable protective clothing.
Environmental:  Prevent from entering public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:  Liquid
Colour:  Colourless
Odour:  Odourless
Evaporation rate:  No data available.
Oxidising:  No data available.
Solubility in water:  No data available.
Viscosity:  No data available.
Boiling point/range°C:  No data available.
Melting point/range°C:  No data available.
Flammability limits %: lower:  No data available.
upper:  No data available.
Flash point°C:  No data available.
Part.coef. n-octanol/water:  No data available.
Autoignition°C:  No data available.
Vapour pressure:  No data available.
Relative density:  No data available.
PH:  No data available.
VOC g/l:  No data available.

9.2. Other information

Other information:  Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity:  Stable under recommended transport or storage conditions.

[cont...]
10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

*Hazardous ingredients:

*2-METHYL-2H-ISOTHIAZOL-3-ONE

<table>
<thead>
<tr>
<th></th>
<th>Rat</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>242</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>Dust/Mist</td>
<td>4H LC50</td>
<td>0.1</td>
<td>mg/l</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>120</td>
<td>mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

*Relevant hazards for product:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory/skin sensitisation</td>
<td>-</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

*Excluded hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (ac. tox. 4)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 3)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 2)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 1)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
HER2 NEGATIVE CONTROL ANTIBODY

STOT-single exposure | - | No hazard: calculated
STOT-repeated exposure | - | No hazard: calculated
Aspiration hazard | - | No hazard: calculated

Symptoms / routes of exposure

- **Skin contact:** * There may be irritation and redness at the site of contact.
- **Eye contact:** * There may be irritation and redness. The eyes may water profusely.
- **Ingestion:** * There may be soreness and redness of the mouth and throat.
- **Inhalation:** * Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** * Delayed effects can be expected after long-term exposure.

**Other information:** Not applicable.

Section 12: Ecological information

12.1. Toxicity

*Hazardous ingredients:

*2-methylisothiazol-3(2H)-one

<table>
<thead>
<tr>
<th>ALGAE</th>
<th>48H EC50</th>
<th>72.5 µg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater fish</td>
<td>96H LC50</td>
<td>4.77 mg/l</td>
</tr>
<tr>
<td>Freshwater invertebrates</td>
<td>48H EC50</td>
<td>934 µg/l</td>
</tr>
<tr>
<td>Marine invertebrates</td>
<td>48H EC50</td>
<td>2.98 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste.

[cont...]
SAFETY DATA SHEET
HER2 NEGATIVE CONTROL ANTIBODY

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: This safety data sheet has been prepared according to;

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: * indicates text in the SDS which has changed since the last revision.


Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
SAFETY DATA SHEET
HER2 PRIMARY ANTIBODY

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

1.1. Product identifier

Product name: HER2 PRIMARY ANTIBODY

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

Use of substance / mixture: Use in laboratories - Professional.

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Newcastle Ltd
Balliol Business Park West
Benton Lane
Newcastle Upon Tyne
NE12 8EW
United Kingdom
Tel: +44 191 2150567
Fax: +44 191 2151152
Email: msds@LeicaBiosystems.com

1.4. Emergency telephone number

Emergency tel: USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
For emergency calls only.

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: * Skin Sens. 1A: H317
Most important adverse effects: * May cause an allergic skin reaction.

2.2. Label elements

Label elements:
Hazard statements: * H317: May cause an allergic skin reaction.
Hazard pictograms: * GHS07: Exclamation mark

Signal words: * Warning
Precautionary statements: * P261: Avoid breathing mist.
* P272: Contaminated work clothing should not be allowed out of the workplace.
* P280: Wear protective gloves/protective clothing/eye protection.
Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: * Remove casualty from exposure ensuring one’s own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Delayed effects can be expected after long-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: * Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

[cont...]
5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: * Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: * Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values
SAFETY DATA SHEET
HER2 PRIMARY ANTIBODY

*2-methylisothiazol-3(2H)-one

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>21 µg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (acute/short term)</td>
<td>43 µg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>21 µg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (acute/short term)</td>
<td>43 µg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral (repeated dose)</td>
<td>27 µg/kg bw/day</td>
<td>General Population</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral (acute/short term)</td>
<td>53 µg/kg bw/day</td>
<td>General Population</td>
<td>Systemic</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Engineering measures: * Ensure there is sufficient ventilation of the area.
Respiratory protection: Respiratory protection not required.
   Hand protection: * Impermeable gloves.
   Eye protection: Safety glasses. Ensure eye bath is to hand.
   Skin protection: * Impermeable protective clothing.
Environmental: Prevent from entering public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid
Colour: Colourless
Odour: Odourless
Evaporation rate: No data available.
Oxidising: No data available.
Solubility in water: No data available.
Viscosity: No data available.
Boiling point/range°C: No data available.
Flammability limits %: lower: No data available.
Flash point°C: No data available.
Autoignitability°C: No data available.
Relative density: No data available.
VOC g/l: No data available.
Melting point/range°C: No data available.
upper: No data available.
Part.coef. n-octanol/water: No data available.
Vapour pressure: No data available.
pH: No data available.

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.
10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

*Hazardous ingredients:

*2-METHYL-2H-ISOTHIAZOL-3-ONE

<table>
<thead>
<tr>
<th>Route</th>
<th>Hazard</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>DERMAL RAT</td>
<td>LD50</td>
<td>242 mg/kg</td>
</tr>
<tr>
<td>DUST/MIST RAT</td>
<td>4H LC50</td>
<td>0.1 mg/l</td>
</tr>
<tr>
<td>ORAL RAT</td>
<td>LD50</td>
<td>120 mg/kg</td>
</tr>
</tbody>
</table>

*Relevant hazards for product:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory/skin sensitisation</td>
<td>-</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

*Excluded hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (ac. tox. 4)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 3)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 2)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 1)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
HER2 PRIMARY ANTIBODY

STOT-single exposure  -  No hazard: calculated
STOT-repeated exposure  -  No hazard: calculated
Aspiration hazard  -  No hazard: calculated

Symptoms / routes of exposure

Skin contact: * There may be irritation and redness at the site of contact.
Eye contact: * There may be irritation and redness. The eyes may water profusely.
Ingestion: * There may be soreness and redness of the mouth and throat.
Inhalation: * Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Delayed effects can be expected after long-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

*Hazardous ingredients:

*2-methylisothiazol-3(2H)-one

<table>
<thead>
<tr>
<th>ALGAE</th>
<th>48H EC50</th>
<th>72.5 µg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater fish</td>
<td>96H LC50</td>
<td>4.77 mg/l</td>
</tr>
<tr>
<td>Freshwater invertebrates</td>
<td>48H EC50</td>
<td>934 µg/l</td>
</tr>
<tr>
<td>Marine invertebrates</td>
<td>48H EC50</td>
<td>2.98 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste.

[cont...]
SAFETY DATA SHEET
HER2 PRIMARY ANTIBODY

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: This safety data sheet has been prepared according to;

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: * indicates text in the SDS which has changed since the last revision.


Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
SAFETY DATA SHEET
POST PRIMARY

Compilation date: 18 NOV 2019
Revision No: 4

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

1.1. Product identifier

Product name: POST PRIMARY

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

Use of substance / mixture: Use in laboratories - Professional.

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Newcastle Ltd
Balliol Business Park West Benton
Lane
Newcastle Upon Tyne
NE12 8EW
United Kingdom
Tel: +44 191 2150567
Fax: +44 191 2151152
Email: msds@LeicaBiosystems.com

1.4. Emergency telephone number

Emergency tel: USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
For emergency calls only.

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: * Skin Sens. 1A: H317
Most important adverse effects: * May cause an allergic skin reaction.

2.2. Label elements

Label elements:
Hazard statements: * H317: May cause an allergic skin reaction.
Hazard pictograms: * GHS07: Exclamation mark

Signal words: * Warning
Precautionary statements: * P261: Avoid breathing mist.
 * P272: Contaminated work clothing should not be allowed out of the workplace.
 * P280: Wear protective gloves/protective clothing/eye protection.
Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: * Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: * Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: * Wash out mouth with water. Consult a doctor.

Inhalation: * Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Delayed effects can be expected after long-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: * Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

[cont...]
SAFETY DATA SHEET
POST PRIMARY

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: * Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: * Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.
Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

*Hazardous ingredients: Glycerol

<table>
<thead>
<tr>
<th>*State</th>
<th>*8 hour TWA</th>
<th>*15 min. STEL</th>
<th>*8 hour TWA</th>
<th>*15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*EU</td>
<td>10 mg/m³</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>*UK</td>
<td>10 mg/m³</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>*IE</td>
<td>10 mg/m³</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>*US</td>
<td>5 mg/m³ / 15 mg/m³**</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>*CA</td>
<td>10 mg/m³</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>*AU</td>
<td>10 mg/m³</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>*NZ</td>
<td>10 mg/m³</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

* respirable dust / ** inhalable dust

[cont...]

---
### SAFETY DATA SHEET

**POST PRIMARY**

May 6, 2003

---

**DNEL/PNEC Values**

<table>
<thead>
<tr>
<th><em>Type</em></th>
<th><em>Exposure</em></th>
<th><em>Value</em></th>
<th><em>Population</em></th>
<th><em>Effect</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>DNEL</em></td>
<td><em>Inhalation (repeated dose)</em></td>
<td><em>21 µg/m³</em></td>
<td><em>Workers</em></td>
<td><em>Local</em></td>
</tr>
<tr>
<td><em>DNEL</em></td>
<td><em>Inhalation (acute/short term)</em></td>
<td><em>43 µg/m³</em></td>
<td><em>Workers</em></td>
<td><em>Local</em></td>
</tr>
<tr>
<td><em>DNEL</em></td>
<td><em>Inhalation (repeated dose)</em></td>
<td><em>21 µg/m³</em></td>
<td><em>General Population</em></td>
<td><em>Local</em></td>
</tr>
<tr>
<td><em>DNEL</em></td>
<td><em>Inhalation (acute/short term)</em></td>
<td><em>43 µg/m³</em></td>
<td><em>General Population</em></td>
<td><em>Local</em></td>
</tr>
<tr>
<td><em>DNEL</em></td>
<td><em>Oral (repeated dose)</em></td>
<td><em>27 µg/kg bw/day</em></td>
<td><em>General Population</em></td>
<td><em>Systemic</em></td>
</tr>
<tr>
<td><em>DNEL</em></td>
<td><em>Oral (acute/short term)</em></td>
<td><em>53 µg/kg bw/day</em></td>
<td><em>General Population</em></td>
<td><em>Systemic</em></td>
</tr>
</tbody>
</table>

---

**8.2. Exposure controls**

**Engineering measures:** Ensure all engineering measures mentioned in section 7 of SDS are in place.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

**Environmental:** Prevent from entering public sewers or the immediate environment.

---

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

- **State:** Liquid
- **Colour:** Yellow
- **Odour:** Odourless
- **Evaporation rate:** No data available.
- **Oxidising:** No data available.
- **Solubility in water:** No data available.
- **Viscosity:** No data available.
- **Boiling point/range°C:** No data available.
- **Melting point/range°C:** No data available.
- **Flammability limits %:** lower: No data available.
- **upper:** No data available.
- **Flash point°C:** No data available.
- **Part.coeff. n-octanol/water:** No data available.
- **Autoflammability°C:** No data available.
- **Vapour pressure:** No data available.
- **Relative density:** No data available.
- **pH:** No data available.
- **VOC g/l:** No data available.

**9.2. Other information**

**Other information:** Not applicable.

---

**Section 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity:** Stable under recommended transport or storage conditions.

---

[cont...]

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

*Hazardous ingredients:

*2-METHYL-2H-ISOTHIAZOL-3-ONE

<table>
<thead>
<tr>
<th>Route</th>
<th>Dermal Rat LD50</th>
<th>Dust/Mist 4H LC50</th>
<th>Oral Rat LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>242  mg/kg</td>
<td>0.1 mg/l</td>
<td>120 mg/kg</td>
</tr>
</tbody>
</table>

*Relevant hazards for product:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory/skin sensitisation</td>
<td>-</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

*Excluded hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (ac. tox. 4)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 3)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 2)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 1)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
</tbody>
</table>
Symptoms / routes of exposure

Skin contact: * There may be irritation and redness at the site of contact.
Eye contact: * There may be irritation and redness. The eyes may water profusely.
Ingestion: * There may be soreness and redness of the mouth and throat.
Inhalation: * Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Delayed effects can be expected after long-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

*Hazardous ingredients:

*2-methylisothiazol-3(2H)-one

<table>
<thead>
<tr>
<th>ALGAE</th>
<th>48H EC50</th>
<th>72.5 µg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater fish</td>
<td>96H LC50</td>
<td>4.77 mg/l</td>
</tr>
<tr>
<td>Freshwater invertebrates</td>
<td>48H EC50</td>
<td>934 µg/l</td>
</tr>
<tr>
<td>Marine invertebrates</td>
<td>48H EC50</td>
<td>2.98 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste.

[cont...]
NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information**

Transport class: This product does not require a classification for transport.

**Section 15: Regulatory information**

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

Specific regulations: * This safety data sheet has been prepared according to;


**15.2. Chemical Safety Assessment**

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

Other information: * indicates text in the SDS which has changed since the last revision.


Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
SAFETY DATA SHEET
POLYMER

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

1.1. Product identifier

Product name: POLYMER

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

Use of substance / mixture: Use in laboratories - Professional.

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Newcastle Ltd
Balliol Business Park West Benton Lane
Newcastle Upon Tyne
NE12 8EW
United Kingdom

Tel: +44 191 2150567
Fax: +44 191 2151152
Email: msds@LeicaBiosystems.com

1.4. Emergency telephone number

Emergency tel: USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
For emergency calls only.

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: * Skin Sens. 1A: H317
Most important adverse effects: * May cause an allergic skin reaction.

2.2. Label elements

Label elements:

Hazard statements: * H317: May cause an allergic skin reaction.
Hazard pictograms: * GHS07: Exclamtion mark

Signal words: * Warning
Precautionary statements: * P261: Avoid breathing mist.
* P272: Contaminated work clothing should not be allowed out of the workplace.
* P280: Wear protective gloves/protective clothing/eye protection.

[cont...]
Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: * Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: * Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: * Wash out mouth with water. Consult a doctor.

Inhalation: * Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Delayed effects can be expected after long-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: * Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: * Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: * Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.
Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

<table>
<thead>
<tr>
<th>*State</th>
<th>*8 hour TWA</th>
<th>*15 min. STEL</th>
<th>*8 hour TWA</th>
<th>*15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*EU</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*UK</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*IE</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*US</td>
<td>5 mg/m³ / 15 mg/m³**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*CA</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*AU</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*NZ</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* respirable dust / ** inhalable dust
**SAFETY DATA SHEET**

**POLYMER**

---

### DNEL/PNEC Values

*2-methylisothiazol-3(2H)-one*

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>21 µg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (acute/short term)</td>
<td>43 µg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>21 µg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation (acute/short term)</td>
<td>43 µg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral (repeated dose)</td>
<td>27 µg/kg bw/day</td>
<td>General Population</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Oral (acute/short term)</td>
<td>53 µg/kg bw/day</td>
<td>General Population</td>
<td>Systemic</td>
</tr>
</tbody>
</table>

---

### 8.2. Exposure controls

**Engineering measures:**  
* Ensure there is sufficient ventilation of the area.

**Respiratory protection:**  
Respiratory protection not required.

**Hand protection:**  
* Impermeable gloves.

**Eye protection:**  
Safety glasses. Ensure eye bath is to hand.

**Skin protection:**  
* Impermeable protective clothing.

**Environmental:**  
Prevent from entering public sewers or the immediate environment.

---

### Section 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- **State:** Liquid
- **Colour:** Yellow
- **Odour:** Odourless
- **Evaporation rate:** No data available.
- **Oxidising:** No data available.
- **Solubility in water:** No data available.
- **Viscosity:** No data available.
- **Boiling point/range°C:** No data available.
- **Melting point/range°C:** No data available.
- **Flammability limits %: lower:** No data available.
- **upper:** No data available.
- **Flash point°C:** No data available.
- **Part.coeff. n-octanol/water:** No data available.
- **Autoflammability°C:** No data available.
- **Vapour pressure:** No data available.
- **pH:** No data available.

#### 9.2. Other information

**Other information:** Not applicable.

---

### Section 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.
10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

*Hazardous ingredients:

*2-methylisothiazol-3(2H)-one

<table>
<thead>
<tr>
<th>Route</th>
<th>Substance</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DERMAL</td>
<td>RAT</td>
<td>LD50</td>
<td>242</td>
</tr>
<tr>
<td>DUST/MIST</td>
<td>RAT</td>
<td>4H LC50</td>
<td>0.1</td>
</tr>
<tr>
<td>ORAL</td>
<td>RAT</td>
<td>LD50</td>
<td>120</td>
</tr>
</tbody>
</table>

*Relevant hazards for product:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory/skin sensitisation</td>
<td>-</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

*Excluded hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (ac. tox. 4)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 3)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 2)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Acute toxicity (ac. tox. 1)</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>-</td>
<td>No hazard: calculated</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
POLYMER

Page: 6

STOT-single exposure - No hazard: calculated
STOT-repeated exposure - No hazard: calculated
Aspiration hazard - No hazard: calculated

Symptoms / routes of exposure

Skin contact: * There may be irritation and redness at the site of contact.
Eye contact: * There may be irritation and redness. The eyes may water profusely.
Ingestion: * There may be soreness and redness of the mouth and throat.
Inhalation: * Exposure may cause coughing or wheezing.

Delayed / immediate effects: * Delayed effects can be expected after long-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

*Hazardous ingredients:

*2-methylisothiazol-3(2H)-one

<table>
<thead>
<tr>
<th>ALGAE</th>
<th>48H EC50</th>
<th>72.5 µg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshwater fish</td>
<td>96H LC50</td>
<td>4.77 mg/l</td>
</tr>
<tr>
<td>Freshwater invertebrates</td>
<td>48H EC50</td>
<td>934 µg/l</td>
</tr>
<tr>
<td>Marine invertebrates</td>
<td></td>
<td>2.98 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.
Recovery operations: Not applicable.
Disposal of packaging: Clean with water. Dispose of as normal industrial waste.

[cont...]
The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information**

**Transport class:** This product does not require a classification for transport.

**Section 15: Regulatory information**

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

**Specific regulations:** * This safety data sheet has been prepared according to:


**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**Other information:** * indicates text in the SDS which has changed since the last revision.

**Sections 8, 11 and 12 data:** Source: European Chemicals Agency, http://echa.europa.eu

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
# Section 1: Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product name:</th>
<th>DAB PART 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>REACH Registration No.:</td>
<td>Registration numbers are not available for some or all of the substance ingredients of this mixture as the substance(s) or its uses are exempt from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.</td>
</tr>
</tbody>
</table>

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

| Use of substance / mixture: | Use in laboratories - Professional. |

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

<table>
<thead>
<tr>
<th>Company name:</th>
<th>Leica Biosystems Newcastle Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Balliol Business Park West</td>
</tr>
<tr>
<td></td>
<td>Benton Lane</td>
</tr>
<tr>
<td></td>
<td>Newcastle Upon Tyne</td>
</tr>
<tr>
<td></td>
<td>NE12 8EW</td>
</tr>
<tr>
<td></td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Tel:</td>
<td>+44 191 2150567</td>
</tr>
<tr>
<td>Fax:</td>
<td>+44 191 2151152</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:mads@LeicaBiosystems.com">mads@LeicaBiosystems.com</a></td>
</tr>
</tbody>
</table>

## 1.4. Emergency telephone number

<table>
<thead>
<tr>
<th>Emergency tel:</th>
<th>USA and Canada: 1-800-424-9300</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outside USA and Canada: +1 703-741-5970</td>
</tr>
<tr>
<td></td>
<td>For emergency calls only.</td>
</tr>
</tbody>
</table>

# Section 2: Hazards identification

## 2.1. Classification of the substance or mixture

- **Classification under CLP:** Acute Tox. 4: H302; Muta. 2: H341; Carc. 1B: H350
- **Classification under CHIP:** Xn: R22; T: R45; Xn: R68
- **Most important adverse effects:** Harmful if swallowed. Suspected of causing genetic defects. May cause cancer.

## 2.2. Label elements

- **Label elements under CLP:**
  - **Hazard statements:** H302: Harmful if swallowed. 
    - H341: Suspected of causing genetic defects. 
    - H350: May cause cancer. 
  - **Signal words:** Danger 
  - **Hazard pictograms:** GHS07: Exclamation mark 
    - GHS08: Health hazard 

[cont...]
Precautionary statements: P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
* P280: Wear protective gloves/protective clothing/eye protection/face protection.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330: Rinse mouth.
P308+313: IF exposed or concerned: Get medical advice/attention.

Label elements under CHIP:

Hazard symbols: Toxic.

Risk phrases: R22: Harmful if swallowed.
R45: May cause cancer.
R68: Possible risk of irreversible effects.

Safety phrases: S36/37: Wear suitable protective clothing and gloves.
S53: Avoid exposure - obtain special instructions before use.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Precautionary phrases: Restricted to professional users.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

**ETHYLENE GLYCOL**

<table>
<thead>
<tr>
<th>EC</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>CHIP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>203-473-3</td>
<td>107-21-1</td>
<td>Acute Tox. 4: H302</td>
<td>Xn: R22</td>
<td>&gt;90%</td>
</tr>
</tbody>
</table>

**3,3’ DIAMINOBENZIDINE TETRAHYDROCHLORIDE HYDRATE**

<table>
<thead>
<tr>
<th>EC</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>CHIP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 685-525-9</td>
<td>868272-85-9</td>
<td>Muta. 2: H341; Carc. 1B: H350; * Acute Tox. 4: H302; * Eye Irrit. 2: H319</td>
<td>T: R45; Xn: R68</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

REACH Registration Number: 01-2119456816-28-XXXX

REACH Registration Number: Not applicable.

[cont...]
Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Water spray. Dry chemical powder. Alcohol resistant foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.
Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements:
- Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
- Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:
- Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Keep away from direct sunlight. Avoid contact with water or humidity.

Suitable packaging:
- Not applicable.

7.3. Specific end use(s)

Specific end use(s):
- Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients: ETHYLENE GLYCOL

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>Respirable dust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>UK</td>
</tr>
<tr>
<td></td>
<td>IE</td>
</tr>
<tr>
<td></td>
<td>US</td>
</tr>
<tr>
<td></td>
<td>CA</td>
</tr>
<tr>
<td></td>
<td>AU</td>
</tr>
<tr>
<td></td>
<td>NZ</td>
</tr>
</tbody>
</table>

DNEL/PNEC Values

Hazardous ingredients: ETHYLENE GLYCOL

<table>
<thead>
<tr>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>35 mg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>106 mg/kg bw/day</td>
<td>Workers</td>
<td>Systemic</td>
</tr>
<tr>
<td>DNEL</td>
<td>Inhalation</td>
<td>7 mg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
<tr>
<td>DNEL</td>
<td>Dermal</td>
<td>53 mg/kg bw/day</td>
<td>General Population</td>
<td>Systemic</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Engineering measures:
- Ensure there is sufficient ventilation of the area.

Respiratory protection:
- Respiratory protection must be available in case of emergency.

Hand protection:
- Impermeable gloves.

Eye protection:
- Safety glasses with side-shields. Ensure eye bath is to hand.

Skin protection:
- Impermeable protective clothing.

Environmental:
- Ensure all engineering measures mentioned in section 7 of SDS are in place. Prevent from entering in public sewers or the immediate environment.
Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- **State:** Liquid
- **Colour:** Brown
- **Odour:** Odourless
- **Evaporation rate:** No data available.
- **Oxidising:** No data available.
- **Solubility in water:** No data available.
- **Also soluble in:** No data available.
- **Viscosity:** No data available.
- **Kinematic viscosity:** No data available.
- **Viscosity test method:** No data available.
- **Boiling point/range°C:** No data available.
- **Melting point/range°C:** No data available.
- **Flammability limits %: lower:** No data available.
  **upper:** No data available.
- **Flash point°C:** No data available.
- **Part.coeff. n-octanol/water:** No data available.
- **Autoflammability°C:** No data available.
- **Relative density:** No data available.
- **VOC g/l:** No data available.
- **Vapour pressure:** No data available.
- **Relative density:** No data available.
- **pH:** No data available.

9.2. Other information

- **Other information:** Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

- **Reactivity:** Stable under recommended transport or storage conditions.

10.2. Chemical stability

- **Chemical stability:** Stable under normal conditions.

10.3. Possibility of hazardous reactions

- **Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.
  Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

- **Conditions to avoid:** Heat. Hot surfaces. Flames.

10.5. Incompatible materials

- **Materials to avoid:** Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

- **Haz. decomp. products:** In combustion emits toxic fumes.
Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ETHYLENE GLYCOL

<table>
<thead>
<tr>
<th>Hazardous ingredients:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IVN Rats, LD50</td>
<td>3260</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORL Mice, LD50</td>
<td>5500</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORL Rats, LD50</td>
<td>4700</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relevant effects for mixture:

<table>
<thead>
<tr>
<th>Effect</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (harmful)</td>
<td>ING</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>-</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Other information:** Not applicable.

Section 12: Ecological information

12.1. Toxicity

**Ecotoxicity values:** No data available.

12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

12.4. Mobility in soil

**Mobility:** Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

[cont...]

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Land (ADR/RID): Not regulated for transport by land.

Sea (IMDG): Not regulated for transport by sea.

Air (IATA): Not regulated for transport by air.

Inland Waterways (ADNR/AND): Not regulated for transport by inland waterways.

Sub-section 14.1 to 14.7 do not apply. However, as with all chemicals, packages containing this substance should be handled during loading, transport, and unloading operations in a manner which minimises the risk of damage to and leakage from those packages.

Section 15: Regulatory information

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

Specific regulations: This safety data sheet has been prepared according to;


15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.
Section 16: Other information

Other information: * indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3:

- H302: Harmful if swallowed.
- * H319: Causes serious eye irritation.
- H341: Suspected of causing genetic defects.
- H350: May cause cancer.
- R22: Harmful if swallowed.
- R45: May cause cancer.
- R68: Possible risk of irreversible effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: DAB PART B

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

Use of substance / mixture: Use in laboratories - Professional.

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Newcastle Ltd
Balliol Business Park West
Benton Lane
Newcastle Upon Tyne
NE12 8EW
United Kingdom

Tel: +44 191 2150567
Fax: +44 191 2151152
Email: msds@LeicaBiosystems.com

1.4. Emergency telephone number

Emergency tel: USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
For emergency calls only.

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: This product has no classification under CHIP.
Classification under CLP: This product has no classification under CLP.

2.2. Label elements

Label elements: This product has no label elements.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Non-classified ingredients: IMIDAZOLE

<table>
<thead>
<tr>
<th>EC</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>CHIP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>206-019-2</td>
<td>288-32-4</td>
<td>Acute Tox. 4; Skin Corr. 1B: H302; Skin Corr. 1B: H314; * Repr. 1B: H360D; Repr. 2: H361</td>
<td>Xn: R22; C: R34</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

REACH Registration Number: 01-2119485825-24-XXXX
Section 4: First aid measures

4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** Wash out mouth with water.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours.

4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

**Delayed / immediate effects:** No data available.

4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.
Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.
Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure all engineering measures mentioned in section 7 of SDS are in place.
Respiratory protection: Respiratory protection not required.
Hand protection: Protective gloves.
Eye protection: Safety glasses. Ensure eye bath is to hand.
Skin protection: Protective clothing.
Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid
Colour: Colourless
Odour: Odourless
Evaporation rate: No data available.
Oxidising: No data available.
Solubility in water: No data available.
Viscosity: No data available.
Boiling point/range°C: No data available. Melting point/range°C: No data available.
Flammability limits %: lower: No data available. upper: No data available.
Flash point°C: No data available. Part.coef. n-octanol/water: No data available.
Autoignition temperature°C: No data available. Vapour pressure: No data available.
Relative density: No data available. pH: No data available.
VOC g/l: No data available.

9.2. Other information

Other information: Not applicable.
Section 10: Stability and reactivity

10.1. Reactivity
Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability
Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid
Conditions to avoid: Heat.

10.5. Incompatible materials
Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products
Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects
Toxicity values: No data available.
Non-classified ingredients: IMIDAZOLE

<table>
<thead>
<tr>
<th>ORAL</th>
<th>RAT</th>
<th>LD50</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>970</td>
<td>mg/kg bw</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.
Eye contact: There may be irritation and redness.
Ingestion: There may be irritation of the throat.
Inhalation: No symptoms.

Delayed / immediate effects: No data available.
Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity
Ecotoxicity values: No data available.
Non-classified ingredients: IMIDAZOLE

<table>
<thead>
<tr>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leuciscus idus</td>
<td>48H LC50</td>
<td>283.6</td>
<td>mg/L</td>
</tr>
<tr>
<td>Daphnia magna</td>
<td>48H EC50</td>
<td>341.5</td>
<td>mg/L</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Persistence and degradability: Biodegradable.
12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: This safety data sheet is not required by regulations.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information: * indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3:

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
* H360D: May damage the unborn child.
H361: Suspected of damaging fertility or the unborn child.
R22: Harmful if swallowed.
R34: Causes burns.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.
Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: HEMATOXYLIN

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

Use of substance / mixture: Use in laboratories - Professional.

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Newcastle Ltd
Balliol Business Park West
Benton Lane
Newcastle Upon Tyne
NE12 8EW
United Kingdom
Tel: +44 191 2150567
Fax: +44 191 2151152
Email: mds@LeicaBiosystems.com

1.4. Emergency telephone number

* Emergency tel: USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-741-5970
For emergency calls only.

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.
Classification under CHIP: This product has no classification under CHIP.

2.2. Label elements

Label elements: This product has no label elements.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients: GLYCEROL

<table>
<thead>
<tr>
<th>EC</th>
<th>CAS</th>
<th>CLP Classification</th>
<th>CHIP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>200-289-5</td>
<td>56-81-5</td>
<td>-</td>
<td>Substance with a Community workplace exposure limit.</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

[cont...]
Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.
Eye contact: Bathe the eye with running water for 15 minutes.
Ingestion: Wash out mouth with water.
Inhalation: Move to fresh air in case of accidental inhalation of vapours.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation at the site of contact.
Eye contact: There may be irritation and redness.
Ingestion: There may be irritation of the throat.
Inhalation: No symptoms.

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

[cont...]
6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.
Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): Use in laboratories - Professional.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients: GLYCEROL

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>Respirable dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*UK</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*IE</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*US</td>
<td>5 mg/m³** / 15 mg/m³***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*CA</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*AU</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>*NZ</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* respirable dust / ** inhalable dust

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure all engineering measures mentioned in section 7 of SDS are in place.
Respiratory protection: Respiratory protection not required.
Hand protection: Protective gloves.
Eye protection: Safety glasses. Ensure eye bath is to hand.
Skin protection: Protective clothing.
Environmental: Prevent from entering in public sewers or the immediate environment.
Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid
Colour: Purple
Odour: Barely perceptible odour
Evaporation rate: No data available.
Oxidising: No data available.
Solubility in water: No data available.
Also soluble in: No data available.
Viscosity: No data available.
Kinematic viscosity: No data available.
Viscosity test method: No data available.
Boiling point/range°C: No data available.
Flammability limits %: lower: No data available.
Feed point°C: No data available.
Autoflammability°C: No data available.
Relative density: No data available.
VOC g/l: No data available.
Melting point/range°C: No data available.
upper: No data available.
Part.coeff. n-octanol/water: No data available.
Vapour pressure: No data available.
pH: No data available.

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity
Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability
Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid
Conditions to avoid: Heat.

10.5. Incompatible materials
Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products
Haz. decomp. products: In combustion emits toxic fumes.

[cont...]
Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

GLYCEROL

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>LD50</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>GPG</td>
<td>LD50</td>
<td>56,750 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
<td>RAT</td>
<td>LD50</td>
<td>23,000 mg/kg</td>
</tr>
<tr>
<td>Vapours</td>
<td>RAT</td>
<td>1H LC50</td>
<td>&gt; 11 mg/l</td>
</tr>
</tbody>
</table>

Toxicity values: No data available.

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.
Eye contact: There may be irritation and redness.
Ingestion: There may be irritation of the throat.
Inhalation: No symptoms.

Delayed / immediate effects: No data available.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

[cont...]
Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Clean with water. Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: This safety data sheet is not required by regulations.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: * indicates text in the SDS which has changed since the last revision.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.