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

- **Product identifier**
- **Trade name:** Butyl Benzyl Phthalate
- **Part number:** DMP-037
- **CAS Number:** 85-68-7
- **EC number:** 201-622-7
- **Index number:** 607-430-00-3
- **Relevant identified uses of the substance or mixture and uses advised against**
  Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Agilent Technologies Manufacturing GmbH & Co. KG
  - **Hewlett-Packard-Str.8**
  - **76337 Waldbronn**
  - **Germany**
  - **Further information obtainable from:**
    - **Telephone:** 0800 603 1000
    - **pdl-msds_author@agilent.com**
  - **Emergency telephone number:** CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

  ![GHS06 skull and crossbones]
  Acute Tox. 3  **H331** Toxic if inhaled.

  ![GHS08 health hazard]
  Repr. 1B  **H360Df** May damage the unborn child. Suspected of damaging fertility.

  ![GHS09 environment]
  Aquatic Acute 1  **H400** Very toxic to aquatic life.
  Aquatic Chronic 1  **H410** Very toxic to aquatic life with long lasting effects.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
  The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)
Trade name: Butyl Benzyl Phthalate

- **Hazard pictograms**

  ![Pictograms](image)

  GHS06  GHS08  GHS09

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  BBP

- **Hazard statements**
  H331  Toxic if inhaled.
  H360Df  May damage the unborn child. Suspected of damaging fertility.
  H410  Very toxic to aquatic life with long lasting effects.

- **Precautionary statements**
  P101  If medical advice is needed, have product container or label at hand.
  P102  Keep out of reach of children.
  P103  Read label before use.
  P201  Obtain special instructions before use.
  P202  Do not handle until all safety precautions have been read and understood.
  P261  Avoid breathing dust/fume/gas/mist/vapours/spray.
  P271  Use only outdoors or in a well-ventilated area.
  P273  Avoid release to the environment.
  P280  Wear protective gloves/protective clothing/eye protection/face protection.
  P304+P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  P308+P313  IF exposed or concerned: Get medical advice/attention.
  P321  Specific treatment (see on this label).
  P391  Collect spillage.
  P403+P233  Store in a well-ventilated place. Keep container tightly closed.
  P405  Store locked up.
  P501  Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Other hazards**

- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterisation: Substances**

  - **CAS No.** Description
    - 85-68-7 BBP

  - **Identification number(s)**
    - **EC number:** 201-622-7
    - **Index number:** 607-430-00-3

- **SVHC**

  - 85-68-7 BBP
4 First aid measures

· Description of first aid measures
  · General information:
    Immediately remove any clothing soiled by the product.
    Remove breathing equipment only after contaminated clothing have been completely removed.
    In case of irregular breathing or respiratory arrest provide artificial respiration.
  · After inhalation:
    Supply fresh air or oxygen; call for doctor.
    In case of unconsciousness place patient stably in side position for transportation.
  · After skin contact:
    Immediately wash with water and soap and rinse thoroughly.
  · After eye contact:
    Rinse opened eye for several minutes under running water. Then consult a doctor.
  · After swallowing:
    If symptoms persist consult doctor.
  · Information for doctor:
    No further relevant information available.

5 Firefighting measures

· Extinguishing media
  · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
· Special hazards arising from the substance or mixture: No further relevant information available.
· Advice for firefighters
  · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures: Not required.
· Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
    Prevent formation of aerosols.
8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- Control parameters

- Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>85-68-7 BBP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL</td>
<td>Long-term value: 5 mg/m³</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making were used as basis.

- Exposure controls

- Personal protective equipment:

- General protective and hygienic measures:
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Store protective clothing separately.

- Respiratory protection:
  - When used as intended with Agilent instruments the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.
  - Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device equipment with appropriate organic or acid gas cartridge.

- Protection of hands:
  - Although not recommended for constant contact with the chemicals or for clean up, nitrile gloves 11-13mil thickness are recommended for normal use. The breakthrough time is 1hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

- Material of gloves
  - For normal use: nitrile rubber, 11-13 mil thickness
  - For direct contact with the chemical: butyl rubber, 12-15 mil thickness
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material
  - For normal use: nitrile rubber: 1 hour
  - For direct contact with the chemical: butyl rubber: > 4 hours

- Eye protection: Goggles recommended during refilling
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - **Form:** Liquid
    - **Colour:** Colourless
  - **Odour:** Light
  - **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/freezing point:** -45-35 °C
  - **Initial boiling point and boiling range:** ~370 °C
- **Flash point:** 198 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 435 °C
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Not determined.
- **Explosive properties:** Product does not present an explosion hazard.
- **Explosion limits:**
  - **Lower:** 0.36 Vol %
  - **Upper:** 3.2 Vol %
- **Vapour pressure at 20 °C:** <0.000001 hPa
- **Density at 20 °C:** 1.12 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with water at 20 °C:** 0.1 g/l
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity**
  - **Dynamic at 20 °C:** 61-63 mPas
  - **Kinematic:** Not determined.
- **Solvent content:**
  - **VOC (EC):** 0.00 %
- **Solids content:** 0.0 %
- **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
Trade name: Butyl Benzyl Phthalate

**11 Toxicological information**

- **Information on toxicological effects**
  - **Acute toxicity**
    Toxic if inhaled.

- **LD/LC50 values relevant for classification:**
  
  **ATE (Acute Toxicity Estimates)**
  
<table>
<thead>
<tr>
<th>Route</th>
<th>LC50/4 h</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalative</td>
<td>&gt;6.7 mg/L (rat)</td>
<td>&gt;6.7 mg/L (rat)</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td>2,330 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td>6,700 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td></td>
<td>&gt;6.7 mg/L (rat)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
  - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
  - **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
    - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
    - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity**
    May damage the unborn child. Suspected of damaging fertility.
  - **STOT-single exposure** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure** Based on available data, the classification criteria are not met.
  - **Aspiration hazard** Based on available data, the classification criteria are not met.

**12 Ecological information**

- **Toxicity**
  - **Aquatic toxicity**: No further relevant information available.
  - **Persistence and degradability**: No further relevant information available.
  - **Behaviour in environmental systems:**
  - **Bioaccumulative potential**: No further relevant information available.
  - **Mobility in soil**: No further relevant information available.

- **Ecotoxic effects:**
  - **Remark**: Very toxic for fish
  - **Additional ecological information:**
  - **General notes:**
    Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
    Also poisonous for fish and plankton in water bodies.
    Very toxic for aquatic organisms

(Contd. on page 7)
Trade name: Butyl Benzyl Phthalate

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation
  Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- European waste catalogue
  - HP 10 Toxic for reproduction
  - HP 14 Ecotoxic

- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - ADR, IMDG, IATA UN3082

- UN proper shipping name
  - ADR 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BBP)
  - IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BBP)

- Transport hazard class(es)
  - ADR
    - Class 9 Miscellaneous dangerous substances and articles.
    - Label 9

  - IMDG, IATA
    - Class 9 Miscellaneous dangerous substances and articles.
    - Label -

- Packing group
  - ADR, IMDG, IATA III

- Environmental hazards:
  - Special marking (ADR): Symbol (fish and tree)
  - Special marking (IMDG, IATA): Symbol (fish and tree)

- Special precautions for user
  - Warning: Miscellaneous dangerous substances and articles.

- Danger code (Kemler): 90
Trade name: Butyl Benzyl Phthalate

- Stowage Category: A
- Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable.

Transport/Additional information:
- ADR
  - Limited quantities (LQ): 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml
- IMDG
  - Limited quantities (LQ): 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml
- Transport category: 3
- UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BBP), 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- Seveso category
  - H2 ACUTE TOXIC
  - E1 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements: 50 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements: 200 t

LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 30, 51c
- Regulation (EU) No 649/2012

National regulations:

- Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57
  - 85-68-7 BBP
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(Contd. on page 9)
**16 Other information**

The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- **Department issuing SDS:** Document Control / Regulatory
- **Contact:** regulatory@ultrasci.com
- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - SVHC: Substances of Very High Concern
  - vPvB: very Persistent and very Bioaccumulative
  - Acute Tox. 3: Acute toxicity – Category 3
  - Repr. 1B: Reproductive toxicity – Category 1B
  - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
  - Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

* Data compared to the previous version altered.