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

1.1 Product identifier

Product name: Phthalic acid, bis-2-ethylhexyl ester

- Part number: DRE-C16173000
- CAS Number: 117-81-7
- EC number: 204-211-0
- Index number: 607-317-00-9

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

No further relevant information available.

Application of the substance / the mixture
Reference material for laboratory use only

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
LGC Limited
Queens Road
Teddington
Middlesex TW11 0LY
UNITED KINGDOM

Further information obtainable from:
Product safety department
eMail: sds-request@lgcgroup.com

1.4 Emergency telephone number: +44 (0) 20 8943 7000 (Monday - Friday: 8am - 5pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS08 health hazard

Repr. 1B H360FD May damage fertility. May damage the unborn child.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS08

Signal word Danger

Hazard statements
H360FD May damage fertility. May damage the unborn child.
Product name: Phthalic acid, bis-2-ethylhexyl ester

· 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.
  P308+P313 IF exposed or concerned: Get medical advice/attention.
  P405 Store locked up.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:
  Restricted to professional users.

2.3 Other hazards
  Results of PBT and vPvB assessment
  PBT: Not applicable.
  vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterisation: Substances
  · CAS No. Description
    117-81-7 Di(2-ethylhexyl) phthalate
  · Identification number(s) None
  · EC number: 204-211-0
  · Index number: 607-317-00-9
  · RTECS: TI 0350000
  · Additional information: For the wording of the listed hazard phrases refer to section 16.

· SVHC
  117-81-7 Di(2-ethylhexyl) phthalate

SECTION 4: First aid measures

· 4.1 Description of first aid measures
  · After inhalation: Supply fresh air; consult doctor in case of complaints.
  · After skin contact: Immediately wash with water and soap and rinse thoroughly.
  · After eye contact: Rinse opened eye for several minutes under running water.
  · After swallowing: Rinse mouth. Do not induce vomiting.

· 4.2 Most important symptoms and effects, both acute and delayed
  No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media
  · Suitable extinguishing agents: Use fire extinguishing methods suitable for surrounding conditions.
Product name: Phthalic acid, bis-2-ethylhexyl ester

5.2 Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters
Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective clothing.

6.2 Environmental precautions:
Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.

6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Store in cool, dry place in tightly closed receptacles.
Open and handle receptacle with care.

Information about fire - and explosion protection: Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.
Store only in the original receptacle unless other advice is given on the CoA.
Keep container in a well-ventilated place. Keep away from sources of ignition and heat.

Information about storage in one common storage facility:
Store away from foodstuffs.

Further information about storage conditions:
Keep container tightly sealed.

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

117-81-7 Di(2-ethylhexyl) phthalate

WEL
Short-term value: 10 mg/m³
Long-term value: 5 mg/m³

Additional information: Lists used were valid at the time of SDS preparation.
Product name: Phthalic acid, bis-2-ethylhexyl ester

8.2 Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Keep away from foodstuffs, beverages and feed.
    Wash hands before breaks and at the end of work.
    Store protective clothing separately.
  - Respiratory protection: Not required.
  - Protection of hands:
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
    The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374

   Protective gloves

- Material of gloves: Butyl rubber, BR
- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Safety glasses

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- General Information
  - Appearance:
    - Form: Liquid
    - Colour: Colourless
    - Odour: Odourless
    - Odour threshold: Not determined.
  - pH-value: Not determined.
  - Change in condition
    - Melting point/freezing point: -46 °C
    - Initial boiling point and boiling range: 7 °C
  - Flash point: 200 °C
  - Flammability (solid, gas): Not determined.
  - Ignition temperature: 370 °C
  - Decomposition temperature: Not determined.
  - Auto-ignition temperature: Not determined.
Product name: Phthalic acid, bis-2-ethylhexyl ester

- Explosive properties: Not determined.
  - Explosion limits:
    - Lower: 0.3 Vol %
    - Upper: 2.44 Vol %
  - Vapour pressure at 20 °C: <0.001 hPa
  - Density at 20 °C: 0.983 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: 5.11 logP
- Viscosity:
  - Dynamic at 20 °C: 77-82 mPas
  - Kinematic: Not determined.
- 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity Stable under normal conditions.
- 10.2 Chemical stability Stable under normal conditions.
- Thermal decomposition / conditions to be avoided:
  Formation of toxic gases is possible during heating or in case of fire.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Heat.
  Sources of ignition
- 10.5 Incompatible materials: Strong oxidizing agents.
- 10.6 Hazardous decomposition products:
  Formation of toxic gases is possible during heating or in case of fire.
  Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  Acute toxicity Based on available data, the classification criteria are not met.
  - LD/LC50 values relevant for classification:
    Oral LD50 30,700 mg/kg (rat)
    Dermal LD50 25,000 mg/kg (rabbit)
  - Primary irritant effect:
    Skin corrosion/irritation Based on available data, the classification criteria are not met.

(Contd. on page 6)
Product name: Phthalic acid, bis-2-ethylhexyl ester

(Contd. from page 5)

- **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 (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Repr. 1B
- **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 fertility. May damage the unborn child.
- **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.

### SECTION 12: Ecological information

- **12.1 Toxicity**
  - Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - General notes:
    - Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
    - Do not allow undiluted product to reach ground water, water course or sewage system.
  - **12.5 Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - Recommendation
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - **European waste catalogue**
    - Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
  - **Uncleaned packaging:**
    - Recommendation: Dispose of in accordance with national regulations.

### SECTION 14: Transport information

- **14.1 UN-Number**
  - ADR, ADN, IMDG, IATA: Not applicable
  - ADR, ADN, IMDG, IATA: Not applicable

(Contd. on page 7)
Safety data sheet
according to 1907/2006/EC, Article 31

Product name: Phthalic acid, bis-2-ethylhexyl ester

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA
  Class: Not applicable

14.4 Packing group
- ADR, IMDG, IATA
  Not applicable

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

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

UN "Model Regulation": Not applicable.

SECTION 15: Regulatory information

15.1 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.
- LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV) Sunset date: 2015-02-21
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 30, 51a

- National regulations:
  Other regulations, limitations and prohibitive regulations

- Substances of very high concern (SVHC) according to REACH, Article 57
  117-81-7 Di(2-ethylhexyl) phthalate

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

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

(Contd. on page 8)
### Additional Information

- **Product name:** Phthalic acid, bis-2-ethylhexyl ester

#### Sources

- **Data compared to the previous version altered.** All sections have been updated.