

# SAFETY DATA SHEET

LC Gradient Sample, Part Number 01080-68703

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

### 1.1 Product identifier

**Product name** : LC Gradient Sample, Part Number 01080-68703  
**Part No.** : 01080-68703

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

#### Identified uses

Analytical chemistry.  
 2x0.5 ml. ampoules

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

Agilent Technologies Manufacturing GmbH & Co. KG  
 Hewlett-Packard-Str. 8  
 76337 Waldbronn  
 Germany  
 0800 603 1000

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

|  |  |
|--|--|
| <input checked="" type="checkbox"/> H225 | FLAMMABLE LIQUIDS - Category 2                                   |
| H301                                     | ACUTE TOXICITY (oral) - Category 3                               |
| H311                                     | ACUTE TOXICITY (dermal) - Category 3                             |
| H331                                     | ACUTE TOXICITY (inhalation) - Category 3                         |
| H360FD                                   | TOXIC TO REPRODUCTION (Fertility and Unborn child) - Category 1B |
| H370                                     | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1    |

#### Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : F; R11  
 T; R23/24/25, R39/23/24/25

**Physical/chemical hazards** : Highly flammable.

**Human health hazards** : Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Date of issue/Date of revision** : 30/07/2015

## SECTION 2: Hazards identification

Hazard pictograms :



Signal word : Danger

Hazard statements : **H225** - Highly flammable liquid and vapour.  
**H301 + H311 + H331** - Toxic if swallowed, in contact with skin or if inhaled.  
**H360FD** - May damage fertility. May damage the unborn child.  
**H370** - Causes damage to organs.

### Precautionary statements

Prevention : **P201** - Obtain special instructions before use.  
**P280** - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
**P210** - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P241** - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.  
**P260** - Do not breathe vapour.

Response : **P304 + P340** - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
**P301 + P310** - IF SWALLOWED: Immediately call a POISON CENTER or physician.  
**P303 + P361 + P353** - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage : **P235** - Keep cool.

Disposal : **P501** - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : Methanol  
 bis(2-Ethylhexyl) phthalate

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

### Special packaging requirements

Tactile warning of danger : Not applicable.

### 2.3 Other hazards

Other hazards which do not result in classification : Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.

## SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification |                                     | Type |
|-------------------------|-------------|---|----------------|-------------------------------------|------|
|                         |             |   | 67/548/EEC     | Regulation (EC) No. 1272/2008 [CLP] |      |
|                         |             |   |                |                                     |      |

Date of issue/Date of revision : 30/07/2015

**SECTION 3: Composition/information on ingredients**

|                                |   |              |   |  |         |
|--------------------------------|---|--------------|---|--|---------|
| Methanol                       | EC: 200-659-6<br>CAS: 67-56-1<br>Index: 603-001-00-X  | ≥90          | F; R11<br>T; R23/24/25,<br>R39/23/24/25   | Flam. Liq. 2, H225<br>Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Acute Tox. 3, H331<br>STOT SE 1, H370  | [1] [2] |
| bis(2-Ethylhexyl)<br>phthalate | EC: 204-211-0<br>CAS: 117-81-7<br>Index: 607-317-00-9 | ≥0.3 -<br><1 | Repr. Cat. 2; R60, R61<br><br><b>See Section 16 for<br/>the full text of the R-<br/>phrases declared<br/>above.</b> | Repr. 1B, H360FD<br>(Fertility and Unborn<br>child)<br><br><b>See Section 16 for the<br/>full text of the H<br/>statements declared<br/>above.</b> | [1] [5] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**4.2 Most important symptoms and effects, both acute and delayed**Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.

**SECTION 4: First aid measures**

- Inhalation** : Toxic if inhaled.
- Skin contact** : Toxic in contact with skin. Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : Toxic if swallowed.

**Over-exposure signs/symptoms**

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

**5.2 Special hazards arising from the substance or mixture**

- Hazards from the substance or mixture** : Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**5.3 Advice for firefighters**

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : **A**void dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

- Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Protective measures** : **P**ut on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- 7.2 Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

### Seveso Directive - Reporting thresholds (in tonnes)

#### Named substances

| Name             | Notification and MAPP threshold | Safety report threshold |
|------------------|---------------------------------|-------------------------|
| <b>M</b> ethanol | 500                             | 5000                    |

## SECTION 7: Handling and storage

### Danger criteria

| Category  | Notification and MAPP threshold | Safety report threshold |
|---|---------------------------------|-------------------------|
| H2: Acute toxicity 2 any route of entry or Acute toxicity 3 Inhalation route of entry | 50                              | 200                     |
| H3: STOT Single exposure 1  | 50                              | 200                     |
| P5c: Flammable liquids 2 and 3 not falling under P5a or P5b                           | 5000                            | 50000                   |
| C2: Toxic   | 50                              | 200                     |
| C7b: Highly flammable (R11)   | 5000                            | 50000                   |

### 7.3 Specific end use(s)

**Recommendations** : Industrial applications, Professional applications.

**Industrial sector specific solutions** : Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

| Product/ingredient name | Exposure limit values  |
|-------------------------|--|
| Methanol                | <b>EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values</b><br>TWA: 200 ppm 8 hours.<br>TWA: 260 mg/m <sup>3</sup> 8 hours. |

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

No DNELs available.

#### PNECs

No PNECs available.

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**SECTION 8: Exposure controls/personal protection**

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Colour** : Not available.
- Odour** : Slight
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : -97.8°C
- Initial boiling point and boiling range** : 64.5°C
- Flash point** : Closed cup: 12°C [Setaflash.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** :  Not applicable.
- Upper/lower flammability or explosive limits** : Lower: 6%  
Upper: >13%
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Relative density** : Not available.
- Solubility(ies)** : Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 464°C
- Decomposition temperature** : Not available.

## SECTION 9: Physical and chemical properties

|                             |                  |
|-----------------------------|------------------|
| <b>Viscosity</b>            | : Not available. |
| <b>Explosive properties</b> | : Not available. |
| <b>Oxidising properties</b> | : Not available. |

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

|  |   |
|--|---|
| <b>10.1 Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.  |
| <b>10.2 Chemical stability</b>                 | : The product is stable.  |
| <b>10.3 Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.   |
| <b>10.4 Conditions to avoid</b>                | : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| <b>10.5 Incompatible materials</b>             | : <input checked="" type="checkbox"/> Reactive or incompatible with the following materials:<br>oxidizing materials   |
| <b>10.6 Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  |

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                      | Result                      | Species     | Dose        | Exposure |   |
|--|-----------------------------|-------------|-------------|----------|---|
| <input checked="" type="checkbox"/> Methanol | LC50 Inhalation Vapour      | Rat         | 145000 ppm  | 1 hours  |   |
|  | LC50 Inhalation Vapour      | Rat         | 64000 ppm   | 4 hours  |   |
|  | LD50 Dermal                 | Rabbit      | 15800 mg/kg | -        |   |
|  | LD50 Oral                   | Rat         | 5600 mg/kg  | -        |   |
|  | bis(2-Ethylhexyl) phthalate | LD50 Dermal | Rabbit      | 25 g/kg  | - |
|  |                             | LD50 Oral   | Rat         | 30 g/kg  | - |

#### Acute toxicity estimates

| Route                                    | ATE value   |
|--|-------------|
| <input checked="" type="checkbox"/> Oral | 100.7 mg/kg |
| Dermal                                   | 302 mg/kg   |
| Inhalation (dusts and mists)             | 0.5033 mg/l |

#### Irritation/Corrosion

| Product/ingredient name     | Result                   | Species | Score | Exposure                | Observation |
|-----------------------------|--------------------------|---------|-------|-------------------------|-------------|
| Methanol                    | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100 milligrams | -           |
|                             | Eyes - Moderate irritant | Rabbit  | -     | 40 milligrams           | -           |
|                             | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20 milligrams  | -           |
| bis(2-Ethylhexyl) phthalate | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                             | Eyes - Mild irritant     | Rabbit  | -     | 500 milligrams          | -           |
|                             | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |

#### Sensitiser



## SECTION 11: Toxicological information

**Conclusion/Summary** : Not available.

**Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity**

Not available.

**Specific target organ toxicity (single exposure)**

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| Methanol                | Category 1 | Not determined    | Not determined |

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

**Potential acute health effects**

**Inhalation** : Toxic if inhaled.

**Ingestion** : Toxic if swallowed.

**Skin contact** : Toxic in contact with skin. Defatting to the skin. May cause skin dryness and irritation.

**Eye contact** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Eye contact** : No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Potential chronic health effects**

**General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : May damage the unborn child.

## SECTION 11: Toxicological information

- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : May damage fertility.
- Other information** : Adverse symptoms may include the following: redness, blurred or double vision. Eye contact can result in corneal damage or blindness. Repeated or prolonged exposure to the substance can produce liver damage.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name                     | Result                                | Species                                    | Exposure |
|---|---------------------------------------|--|----------|
| Methanol<br><br>bis(2-Ethylhexyl) phthalate | Acute EC50 24500000 µg/l Fresh water  | Daphnia - Daphnia magna - Larvae           | 48 hours |
|   | Acute LC50 2500000 µg/l Marine water  | Crustaceans - Crangon crangon - Adult      | 48 hours |
|   | Acute LC50 290 mg/l Fresh water       | Fish - Danio rerio - Egg                   | 96 hours |
|   | Chronic NOEC 9.96 mg/l Marine water   | Algae - Ulva pertusa                       | 96 hours |
|   | Acute EC50 31000000 µg/l Marine water | Algae - Gymnodinium breve                  | 96 hours |
|   | Acute EC50 133 µg/l Fresh water       | Daphnia - Daphnia pulex - Neonate          | 48 hours |
|   | Acute LC50 690 µg/l Fresh water       | Fish - Ictalurus punctatus                 | 96 hours |
|   | Chronic NOEC 109 µg/l Fresh water     | Crustaceans - Eurytemora affinis - Nauplii | 21 days  |
|   | Chronic NOEC 77 µg/l Fresh water      | Daphnia - Daphnia magna                    | 21 days  |
|   | Chronic NOEC 502 µg/l Fresh water     | Fish - Oncorhynchus mykiss - Egg           | 90 days  |

### 12.2 Persistence and degradability

| Product/ingredient name     | Test  | Result                   | Dose | Inoculum                   |
|-----------------------------|---|--------------------------|------|----------------------------|
| bis(2-Ethylhexyl) phthalate | OECD 301B Ready Biodegradability - CO2 Evolution Test | 82 % - Readily - 29 days | -    | 20.3 mg/l Activated sludge |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Methanol                | -                 | -          | Readily          |

### 12.3 Bioaccumulative potential

| Product/ingredient name     | LogP <sub>ow</sub> | BCF  | Potential |
|-----------------------------|--------------------|------|-----------|
| Methanol                    | -0.77              | <10  | low       |
| bis(2-Ethylhexyl) phthalate | 7.6                | 1380 | high      |

### 12.4 Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.
- Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

- PBT** : Not applicable.
- vPvB** : Not applicable.

- 12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

#### European waste catalogue (EWC)

| Waste code | Waste designation  |
|------------|--|
| 07 07 03*  | organic halogenated solvents, washing liquids and mother liquors |

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

#### Regulatory information

**ADR/RID / IMDG / IATA** : Not regulated.

**Additional information** :  **Special provisions**  
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#### Remarks

De minimis quantities

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.


## SECTION 15: Regulatory information

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

#### EU Regulation (EC) No. 1907/2006 (REACH)

#### Annex XIV - List of substances subject to authorisation

##### Annex XIV

| Ingredient name  | Intrinsic property    | Status | Reference number | Date of revision |
|--|-----------------------|--------|------------------|------------------|
|  Bis(2-ethylhexyl)phthalate; DEHP | Toxic to reproduction | Listed | 4                | 2/21/2011        |

#### Substances of very high concern

## SECTION 15: Regulatory information

| Ingredient name   | Intrinsic property                              | Status    | Reference number           | Date of revision |
|---|---|-----------|----------------------------|------------------|
| <input checked="" type="checkbox"/> Bis (2-ethylhexyl)phthalate; DEHP | Toxic to reproduction                           | Candidate | ED/67/2008,<br>ED/108/2014 | 12/17/2014       |
| -   | Substance of equivalent concern for environment | Candidate | ED/67/2008,<br>ED/108/2014 | 12/17/2014       |

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Restricted to professional users.

### Other EU regulations

**Europe inventory** : All components are listed or exempted.

| Product/ingredient name   | Carcinogenic effects | Mutagenic effects | Developmental effects          | Fertility effects           |
|---|----------------------|-------------------|--------------------------------|-----------------------------|
| <input checked="" type="checkbox"/> Bis(2-ethylhexyl) phthalate | -                    | -                 | Repr. 1B, H360D (Unborn child) | Repr. 1B, H360F (Fertility) |

### Seveso Directive

This product is controlled under the Seveso Directive.

### Named substances

| Name   |
|--|
| <input checked="" type="checkbox"/> Methanol |

### Danger criteria

| Category   |
|--|
| <input checked="" type="checkbox"/> H2: Acute toxicity 2 any route of entry or Acute toxicity 3 Inhalation route of entry<br>H3: STOT Single exposure 1<br>P5c: Flammable liquids 2 and 3 not falling under P5a or P5b<br>C2: Toxic<br>C7b: Highly flammable (R11) |

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

- Australia** : All components are listed or exempted.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.
- Japan** : All components are listed or exempted.
- Malaysia** :  Not determined.

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|                          |  |
|--------------------------|--|
| <b>New Zealand</b>       | : All components are listed or exempted. |
| <b>Philippines</b>       | : All components are listed or exempted. |
| <b>Republic of Korea</b> | : Not determined.                        |
| <b>Taiwan</b>            | : All components are listed or exempted. |
| <b>United States</b>     | : All components are listed or exempted. |

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification   | Justification   |
|--|---|
| Flam. Liq. 2, H225<br>Acute Tox. 3, H301<br>Acute Tox. 3, H311<br>Acute Tox. 3, H331<br>Repr. 1B, H360FD (Fertility and Unborn child)<br>STOT SE 1, H370 | On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

**Full text of abbreviated H statements** : H225 Highly flammable liquid and vapour.  
 H301 (oral) Toxic if swallowed.  
 H311 (dermal) Toxic in contact with skin.  
 H331 (inhalation) Toxic if inhaled.  
 H360FD (Fertility and Unborn child) May damage fertility. May damage the unborn child.  
 H370 Causes damage to organs.

**Full text of classifications [CLP/GHS]** : Acute Tox. 3, H301 ACUTE TOXICITY (oral) - Category 3  
 Acute Tox. 3, H311 ACUTE TOXICITY (dermal) - Category 3  
 Acute Tox. 3, H331 ACUTE TOXICITY (inhalation) - Category 3  
 Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2  
 Repr. 1B, H360FD TOXIC TO REPRODUCTION (Fertility and Unborn child) - Category 1B  
 STOT SE 1, H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1

**Full text of abbreviated R phrases** : R11- Highly flammable.  
 R60- May impair fertility.  
 R61- May cause harm to the unborn child.  
 R23/24/25- Also toxic by inhalation, in contact with skin and if swallowed.  
 R39/23/24/25- Also toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**Full text of classifications [DSD/DPD]** : F - Highly flammable  
 Repr. Cat. 2 - Toxic to reproduction category 2  
 T - Toxic

**Date of issue/ Date of revision** : 30/07/2015

**Date of previous issue** : 14/02/2013.

**Version** : 3

### Notice to reader

**Date of issue/Date of revision** : 30/07/2015

## **SECTION 16: Other information**

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