Printing date 27.03.2019

Agilent

Version number 2

Revision: 23.03.2019

1 Identification

- · Product identifier
- · Trade name: GPC Calibration Standard (1X1 mL)
- Part number: CLP-341-1
- 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 Australia Pty Ltd 679 Springvale Road Mulgrave Victoria 3170, Australia
- Further information obtainable from: Telephone: 1800 802 402
 e-mail: pdl-msds_author@agilent.com
 Emergency telephone number: CHEMTREC®: +(61) - 290372994

2 Hazard(s) Identification

· Classification of the substance or mixture

health hazard

Repr. 1B H360 May damage fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

· Label elements

• GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS). • Hazard pictograms



· Signal word Danger

• Hazard-determining components of labelling: dichloromethane di-(2-ethylhexyl) phthalate

pentachlorophenol

• Hazard statements Harmful if swallowed.

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(Contd. of page 1) Causes skin irritation. Causes serious eye irritation. May damage fertility or the unborn child. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. · Precautionary statements If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves / eye protection / face protection. Use personal protective equipment as required. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up. 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 and Information on Ingredients

· Chemical characterisation: Mixtures

 \cdot **Description:** Mixture of substances listed below with nonhazardous additions.

| 75-09-2 | dichloromethane | 76.094% |
|----------|---|---------|
| | 😵 STOT RE 2, H373; 🚸 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335 | |
| 117-81-7 | di-(2-ethylhexyl) phthalate | 1.131% |
| | 🗞 Repr. 1B, H360 | |
| 87-86-5 | pentachlorophenol | 0.106% |
| | Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330; 🚸 Carc. 2, H351; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 | |



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·SVHC

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

• Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

· Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: 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. If symptoms persist, consult a doctor.
- After swallowing: Call for a doctor immediately.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

· Special hazards arising from the substance or mixture

- During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- · Environmental precautions: 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.

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Open and handle receptacle with care.

Prevent formation of aerosols.

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

· Conditions for safe storage, including any incompatibilities

· Storage:

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- Specific end use(s) No further relevant information available.

8 Exposure controls and 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:

75-09-2 dichloromethane

NES |Long-term value: 174 mg/m³, 50 ppm Sk

WES Long-term value: 174 mg/m³, 50 ppm Sk

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

NES Short-term value: 10 mg/m³

Long-term value: 5 mg/m³

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

87-86-5 pentachlorophenol

NES Long-term value: 0.5 mg/m³ Sk WES Long-term value: 0.5 mg/m³

Sk

· 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.
- Avoid contact with the eyes and skin.

· 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 (Contd. on page 5)



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(Contd. of page 4) 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

· Penetration time of glove material

For normal use: nitrile rubber: 1 hour

- For direct contact with the chemical: butyl rubber: >4 hours
- Eye protection:

Safety glasses



Tightly sealed goggles

9 Physical and Chemical Properties

| General Information | | | |
|-------------------------------------|---|---------------|--|
| Appearance: | | | |
| Form: | Fluid | | |
| Colour: | According to product specification | | |
| Odour: | Characteristic | | |
| Odour threshold: | Not determined. | | |
| pH-value: | Not determined. | | |
| Change in condition | | | |
| Melting point/freezing point: | Undetermined. | Undetermined. | |
| Initial boiling point and boiling r | ange: 40 °C | | |
| Flash point: | Not applicable. | | |
| Flammability (solid, gas): | Not applicable. | | |
| Ignition temperature: | 605 °C | | |
| Decomposition temperature: | Not determined. | | |
| Auto-ignition temperature: | Product is not selfigniting. | | |
| Explosive properties: | Product does not present an explosion hazard. | | |
| Explosion limits: | | | |
| Lower: | 13 Vol % | | |
| Upper: | 22 Vol % | | |
| Vapour pressure at 20 °C: | 360 hPa | | |
| Density: | Not determined. | | |
| Relative density | Not determined. | | |
| Vapour density | Not determined. | | |
| Evaporation rate | Not determined. | | |

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according to WHS Regulations

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| | (Contd. of | f page |
|---|--|--------|
| · Solubility in / Miscibility with | | |
| water: | Not miscible or difficult to mix. | |
| · Partition coefficient: n-octanol/water: | Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Organic solvents: | 76.1 % | |
| VOC (EC) | 76.09 % | |
| Solids content: | 0.1 % | |
| · 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.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological Information

· Information on toxicological effects

· Acute toxicity

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

| Oral | LD50 | 1,943 mg/kg (rat) |
|------------|----------|--------------------|
| Dermal | LD50 | >2,536 mg/kg (rat) |
| Inhalative | LC50/4 h | 116 mg/L (rat) |

75-09-2 dichloromethane Oral 1,600 mg/kg (rat) LD50 Dermal LD50 >2,000 mg/kg (rat) Inhalative LC50/4 h 88 mg/L (rat) 117-81-7 di-(2-ethylhexyl) phthalate Oral LD50 >20,000 mg/kg (rat) LD50 4,000 mg/kg (rat) Dermal 25,000 mg/kg (rabbit) 87-86-5 pentachlorophenol LD50 27 mg/kg (rat) Oral LD50 Dermal 96 mg/kg (rat) (Contd. on page 7)



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Inhalative LC50/4 h 355 mg/L (rat)

· Primary irritant effect:

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- · Skin corrosion/irritation Irritant to skin and mucous membranes.
- · Serious eye damage/irritation Irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:
- The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
- Harmful

Irritant

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Repr. 1B

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.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): 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.

· 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.

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

14 Transport information

· Not Regulated, De minimus Quantities

- · UN-Number
- · ADG, IMDG, IATA

UN1593

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Safety Data Sheet

according to WHS Regulations

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Trade name: GPC Calibration Standard (1X1 mL)

| | (Contd. of p |
|---|---|
| UN proper shipping name | |
| ADG | 1593 DICHLOROMETHANE |
| IMDG, IATA | DICHLOROMETHANE |
| Transport hazard class(es) | |
| ADG, IMDG, IATA | |
| | |
| Class | 6.1 Toxic substances. |
| Label | 6.1 |
| Packing group | |
| ADG, IMDG, IATA | III |
| Environmental hazards: | Not applicable. |
| Special precautions for user | Warning: Toxic substances. |
| Danger code (Kemler): | 60 |
| EMS Number: | F-A,S-A |
| Segregation groups | Liquid halogenated hydrocarbons |
| Stowage Category | A |
| Transport in bulk according to Annex II o | |
| and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| ADG | |
| 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 | 2 |
| Tunnel restriction code | E |
| 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 |
| UN "Model Regulation": | UN 1593 DICHLOROMETHANE, 6.1, III |

15 Regulatory information

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

· Australian Inventory of Chemical Substances

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

75-09-2 dichloromethane

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S6, S7

· Directive 2012/18/EU

87-86-5 pentachlorophenol

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· 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

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

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.

· Relevant phrases

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

· 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 EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified 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 Acute Tox. 4: Acute toxicity - Category 4 Acute Tox. 2: Acute toxicity - Category 2 Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A Carc. 2: Carcinogenicity - Category 2 Repr. 1B: Reproductive toxicity - Category 1B STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2



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