

Printing date 03/27/2019 Version Number 2 Reviewed on 03/23/2019

1 Identification

· Product identifier

· Trade name: GPC Calibration Standard (1X1 mL)

· Part number: CLP-342-1

· Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Agilent Technologies, Inc. 5301 Stevens Creek Blvd.

Santa Clara, CA 95051 USA

· Information department:

Telephone: 800-227-9770

e-mail: pdl-msds author@agilent.com

· Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Carc. 1B H350 May cause cancer.

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

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



GHS07

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 labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

dichloromethane

di-(2-ethylhexyl) phthalate

· Hazard statements

Harmful if swallowed.

Causes skin irritation.

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Causes serious eye irritation.

May cause cancer.

May damage fertility or the unborn child.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/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/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep 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.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

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.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



 *2 Health = *2

Fire = 0

REACTIVITY $\boxed{0}$ Reactivity = 0

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

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

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· Dangero	is components:	ita. or page 2)
75-09-2	dichloromethane	80.618%
117-81-7	di-(2-ethylhexyl) phthalate	0.377%

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: Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 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 fighting measures that suit the environment.
- · 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.

· Protective Action Criteria for Chemicals

· PAC-1:		
75-09-	dichloromethane	200 ppm
117-81-	di-(2-ethylhexyl) phthalate	10 mg/m ³
72-43-	methoxychlor	30 mg/m ³
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· PAC-2:		
75-09-2	dichloromethane	560 ppm
117-81-7	di-(2-ethylhexyl) phthalate	1,000 mg/m ³
72-43-5	methoxychlor	150 mg/m³
· PAC-3:		
75-09-2	dichloromethane	6,900 ppm
117-81-7	di-(2-ethylhexyl) phthalate	6,100 mg/m ³
72-43-5	methoxychlor	4,500 mg/m ³

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.

- · Information about protection against explosions and fires: 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 receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

· Components w	ith limit value	s that require	monitoring at	the workplace

75-09-2 dichloromethane PEL Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052 REL See Pocket Guide App. A TLV Long-term value: 174 mg/m³, 50 ppm BEI 117-81-7 di-(2-ethylhexyl) phthalate PEL Long-term value: 5 mg/m³ REL Short-term value: 10 mg/m³ Long-term value: 5 mg/m³ See Pocket Guide App. A TLV Long-term value: 5 mg/m³ See Pocket Guide App. A TLV Long-term value: 5 mg/m³ (Contd. on page 5)

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· Ingredients with biological limit values:

75-09-2 dichloromethane

BEI 0.3 mg/L

Medium: urine Time: end of shift

Parameter: Dichloromethane (semi-quantitative)

- · Additional information: The lists that were valid during the creation 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.

· Breathing equipment:

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 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil 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

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid

Color: According to product specification

· Odor: Characteristic · Odor threshold: Not determined.

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· pH-value:	Not determined.
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. 40 °C (104 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	605 °C (1,121 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits: Lower: Upper:	13 Vol % 22 Vol %
· Vapor pressure at 20 °C (68 °F):	360 hPa (270 mm Hg)
 Density: Relative density Vapor density Evaporation rate 	Not determined. Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water	r): Not determined.
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
· Solvent content: Organic solvents: VOC content:	80.6 % 0.00 % 0.0 g/l / 0.00 lb/gal
Solids content: · Other information	0.2 % 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.



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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50	· LD/LC50 values that are relevant for classification:		
ATE (Acu	ATE (Acute Toxicity Estimate)		
Oral	LD50	1,985 mg/kg (rat)	
Dermal	LD50	>2,481 mg/kg (rat)	
Inhalative	LC50/4 h	109 mg/L (rat)	

75-09-2 di	75-09-2 dichloromethane		
Oral	LD50	1,600 mg/kg (rat)	
Dermal	LD50	>2,000 mg/kg (rat)	
Inhalative	LC50/4 h	88 mg/L (rat)	
117-81-7	117-81-7 di-(2-ethylhexyl) phthalate		
Oral	LD50	>20,000 mg/kg (rat)	
Dermal	LD50	4,000 mg/kg (rat)	
		25,000 mg/kg (rabbit)	

- · Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
75-09-2	dichloromethane	2A
117-81-7	di-(2-ethylhexyl) phthalate	2B
72-43-5	methoxychlor	3
198-55-0	perylene	3
· NTP (Nat	tional Toxicology Program)	
75-09-2	dichloromethane	R
117-81-7	di-(2-ethylhexyl) phthalate	R
198-55-0	perylene	R
· OSHA-C	a (Occupational Safety & Health Administration)	
75-09-2 d	lichloromethane	

12 Ecological information

- ·Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

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- · Behavior 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 (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 of together with household garbage. Do not allow product to reach sewage system.

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

14 Transport information

· Not Regulated, De minimus Quantities

· UN-Number · DOT, IMDG, IATA	UN1593	
· UN proper shipping name · DOT · IMDG, IATA	Dichloromethane DICHLOROMETHANE	
· Transport hazard class(es)		
· DOT, IMDG, IATA		
· Class	6.1 Toxic substances	
· Label	6.1	
· Packing group · DOT, 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	
		(Contd. on page



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· Stowage Category	A
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
· Transport/Additional information:	
· DOT · Quantity limitations · Hazardous substance:	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L 1000 lbs, 454 kg
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L 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
- ·Sara

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· Section 35	· Section 355 (extremely hazardous substances):		
None of th	e ingredients is listed.		
· Section 31	· Section 313 (Specific toxic chemical listings):		
75-09-2	dichloromethane		
117-81-7	di-(2-ethylhexyl) phthalate		
72-43-5	methoxychlor		
· TSCA (To	oxic Substances Control Act):		
75-09-2	dichloromethane		
8001-30-7	corn oil		
117-81-7	di-(2-ethylhexyl) phthalate		
7704-34-9	sulfur		
198-55-0	perylene		
· Propositio	on 65		
· Chemicals	s known to cause cancer:		

75-09-2 dichloromethane
117-81-7 di-(2-ethylhexyl) phthalate
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
· Chemicals known to cause reproductive toxicity for males:
117-81-7 di-(2-ethylhexyl) phthalate

· Chemicals known to cause developmental toxicity:

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

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· Carcinogenic categories

g •, ,	
dichloromethane	L
di-(2-ethylhexyl) phthalate	B2
methoxychlor	D
· TLV (Threshold Limit Value established by ACGIH)	
dichloromethane	A3
di-(2-ethylhexyl) phthalate	A3
methoxychlor	A4
Ca (National Institute for Occupational Safety and Health)	
dichloromethane	
di-(2-ethylhexyl) phthalate	
methoxychlor	
	methoxychlor reshold Limit Value established by ACGIH) dichloromethane di-(2-ethylhexyl) phthalate methoxychlor Ca (National Institute for Occupational Safety and Health) dichloromethane di-(2-ethylhexyl) phthalate

- · National regulations:
- · Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· 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.

- · Department issuing SDS: Document Control / Regulatory
- · Contact: regulatory@ultrasci.com
- · Date of preparation / last revision 03/27/2019 / 1
- · 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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A Carc. 1B: Carcinogenicity – Category 1B

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

* Data compared to the previous version altered.