

Printing date 27.03.2019 Version number 3 Revision: 22.03.2019

1 Identification

· Product identifier

· Trade name: Hexachlorobenzene Standard (1X1 mL)

· Part number: CH-151-1

· 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



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



health hazard

STOT SE 1 H370 Causes damage to organs.

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







GHS02

GHS06

GHS08

- · Signal word Danger
- · Hazard-determining components of labelling: methanol
- · Hazard statements

Highly flammable liquid and vapour.

Toxic if inhaled.

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Causes damage to organs.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see on this label).

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

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

· Dangerous components:

67-56-1 methanol

♦ Flam. Liq. 2, H225; ♦ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331;

STOT SE 1, H370

· 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.

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.

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99.987%



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- · 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:
- · 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:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 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.

Wear protective equipment. Keep unprotected persons away.

- 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.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.

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· Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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:

67-56-1 methanol

NES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Sk
WES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm

- 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

· Penetration time of glove material

For normal use: nitrile rubber: 1 hour

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

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· Eye protection:

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Tightly sealed goggles

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9 Physical	and C	nemical	Prone	rines

Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Colour: According to product specification

Odour: CharacteristicOdour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

 $\begin{array}{lll} \textbf{Melting point/freezing point:} & -98 \ ^{\circ}\text{C} \\ \textbf{Initial boiling point and boiling range:} \ 64.7 \ ^{\circ}\text{C} \\ \end{array}$

· Flash point: 9 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 455 °C

• **Decomposition temperature:** Not determined.

• **Auto-ignition temperature:** Product is not selfigniting.

• Explosive properties: Product is not explosive. However, formation of explosive air/vapour

mixtures are possible.

· Explosion limits:

Lower: 5.5 Vol % **Upper:** 44 Vol %

· Vapour pressure at 20 °C: 100 hPa

Density at 20 °C: 0.80016 g/cm³
 Relative density Not determined.
 Vapour density Not determined.
 Evaporation rate Not determined.

· 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: 100.0 %

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VOC (EC)	99.99 %	
Solids content: Other information	0.0% 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

ATE (Acute Toxicity Estimates)

Inhalative LC50/4 h 3 mg/L

67-56-1 methanol

Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)

- Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No 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:

Toxic

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 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- · 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	l, De	minimus	Quantities
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· UN-Number

· ADG, IMDG, IATA UN1230

· UN proper shipping name

· ADG 1230 METHANOL solution • IMDG, IATA METHANOL solution

- · Transport hazard class(es)
- · ADG





· Class 3 Flammable liquids.

· **Label** 3+6.1

· IMDG



· Class 3 Flammable liquids.

· **Label** 3/6.1

 \cdot IATA



· Class 3 Flammable liquids.

· **Label** 3 (6.1)

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Packing group				
ADG, IMDG, IATA	II			
Environmental hazards:	Not applicable.			
Special precautions for user	Warning: Flammable liquids.			
Danger code (Kemler):	336			
EMS Number:	F-E,S-D			
Stowage Category	В			
Stowage Code	SW2 Clear of living quarters.			
· Transport in bulk according to Annex II of Marpol				
and the IBC Code	Not applicable.			
Transport/Additional information:				
ADG				
Limited quantities (LQ)	1L			
Excepted quantities (EQ)	Code: E2			
	Maximum net quantity per inner packaging: 30 ml			
	Maximum net quantity per outer packaging: 500 ml			
Transport category	2			
Tunnel restriction code	D/E			
IMDG				
Limited quantities (LQ)	1L			
Excepted quantities (EQ)	Code: E2			
	Maximum net quantity per inner packaging: 30 ml			
	Maximum net quantity per outer packaging: 500 ml			
UN "Model Regulation":	UN 1230 METHANOL SOLUTION, 3 (6.1), II			

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					
	67-56-1	methanol	S5, S6		
	118-74-1	hexachlorobenzene	S7		

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

H2 ACUTE TOXIC

P5c FLAMMABLE LIQUIDS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.



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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

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

· 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

vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

STOT SE 1: Specific target organ toxicity (single exposure) - Category 1

ΑU