Kit Components

Product code	Description
QCK-900	**QualityCheck Waste Water Series Kit**

Components:

QCM-100	QualityCheck Volatiles Sample (1X2 mL)
QCM-200	QualityCheck Pesticides Sample (1X2 mL)
QCM-220	QualityCheck Toxaphene Sample (1X2 mL)
QCM-230	QualityCheck Chlordane Sample (1X2 mL)
QCM-240	QualityCheck PCBs Sample (1X2 mL)
QCM-300	QualityCheck Base/Neutrals Sample (1X2 mL)
QCM-400	QualityCheck acids sample (1 x 2 mL)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

*
1 Identification

· **Product identifier**

· **Trade name: QualityCheck Volatiles Sample (1X2 mL)**

· **Part number:** QCM-100
· **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

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2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS02 Flame

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


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.
Carc. 1A H350 May cause cancer.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT SE 1 H370 Causes damage to organs.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.


GHS07

Acute Tox. 4 H312 Harmful in contact with skin.
Skin Sens. 1 H317 May cause an allergic skin reaction.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck Volatiles Sample (1X2 mL)

(Contd. of page 1)

· **Hazard pictograms**

GHS02 GHS06 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
benzene
1,1,2,2-tetrachloroethane
1,2-dichloroethane
tetrachloroethylene
carbon tetrachloride

· **Hazard statements**
Highly flammable liquid and vapor.
Harmful in contact with skin.
Toxic if inhaled.
May cause an allergic skin reaction.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
Causes damage to organs.
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.
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/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.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
Call a poison center/doctor if you feel unwell.
Get medical advice/attention if you feel unwell.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
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.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 2)

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *1
Fire = 3
Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

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

· **Dangerous components:**

67-56-1	methanol	92.592%
108-10-1	4-methylpentan-2-one	0.506%
75-35-4	1,1-dichloroethylene	0.379%
79-34-5	1,1,2,2-tetrachloroethane	0.379%
79-00-5	1,1,2-trichloroethane	0.379%
127-18-4	tetrachloroethylene	0.379%
56-23-5	carbon tetrachloride	0.379%
107-06-2	1,2-dichloroethane	0.379%
71-43-2	benzene	0.303%
108-88-3	toluene	0.303%
100-41-4	ethylbenzene	0.303%
75-09-2	dichloromethane	0.303%
106-46-7	1,4-dichlorobenzene	0.303%
71-55-6	1,1,1-trichloroethane	0.253%
67-66-3	trichloromethane	0.253%
79-01-6	trichloroethylene	0.253%
75-27-4	bromodichloromethane	0.253%

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 3)

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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.
Remove breathing apparatus 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.
· **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, extinguishing 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.

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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.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
67-56-1	methanol	530 ppm
108-10-1	4-methylpentan-2-one	75 ppm

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Volatiles Sample (1X2 mL)

(Contd. of page 4)

75-35-4	1,1-dichloroethylene	45 ppm
79-34-5	1,1,2,2-tetrachloroethane	3 ppm
79-00-5	1,1,2-trichloroethane	30 ppm
127-18-4	tetrachloroethylene	35 ppm
56-23-5	carbon tetrachloride	1.2 ppm
107-06-2	1,2-dichloroethane	50 ppm
78-87-5	1,2-dichloropropane	30 ppm
95-50-1	1,2-dichlorobenzene	50 ppm
541-73-1	1,3-dichlorobenzene	6 ppm
71-43-2	benzene	52 ppm
108-88-3	toluene	67 ppm
100-41-4	ethylbenzene	33 ppm
75-09-2	dichloromethane	200 ppm
106-46-7	1,4-dichlorobenzene	30 ppm
156-60-5	trans-dichloroethylene	280 ppm
108-90-7	chlorobenzene	10 ppm
71-55-6	1,1,1-trichloroethane	230 ppm
67-66-3	trichloromethane	2 ppm
79-01-6	trichloroethylene	130 ppm
124-48-1	dibromochloromethane	1.1 mg/m³
75-27-4	bromodichloromethane	1.3 mg/m³
75-25-2	bromoform	1.5 ppm

· **PAC-2:**

67-56-1	methanol	2,100 ppm
108-10-1	4-methylpentan-2-one	500 ppm
75-35-4	1,1-dichloroethylene	500 ppm
79-34-5	1,1,2,2-tetrachloroethane	120 ppm
79-00-5	1,1,2-trichloroethane	180 ppm
127-18-4	tetrachloroethylene	230 ppm
56-23-5	carbon tetrachloride	13 ppm
107-06-2	1,2-dichloroethane	200 ppm
78-87-5	1,2-dichloropropane	220 ppm
95-50-1	1,2-dichlorobenzene	170 ppm
541-73-1	1,3-dichlorobenzene	66 ppm
71-43-2	benzene	800 ppm
108-88-3	toluene	560 ppm
100-41-4	ethylbenzene	1100* ppm
75-09-2	dichloromethane	560 ppm
106-46-7	1,4-dichlorobenzene	170 ppm
156-60-5	trans-dichloroethylene	1,000 ppm
108-90-7	chlorobenzene	150 ppm

(Contd. on page 6)

(Contd. of page 5)

71-55-6	1,1,1-trichloroethane	600 ppm
67-66-3	trichloromethane	64 ppm
79-01-6	trichloroethylene	450 ppm
124-48-1	dibromochloromethane	12 mg/m³
75-27-4	bromodichloromethane	14 mg/m³
75-25-2	bromoform	6.8 ppm
· **PAC-3:**		
67-56-1	methanol	7200* ppm
108-10-1	4-methylpentan-2-one	3000* ppm
75-35-4	1,1-dichloroethylene	1,000 ppm
79-34-5	1,1,2,2-tetrachloroethane	150 ppm
79-00-5	1,1,2-trichloroethane	500 ppm
127-18-4	tetrachloroethylene	1,200 ppm
56-23-5	carbon tetrachloride	340 ppm
107-06-2	1,2-dichloroethane	300 ppm
78-87-5	1,2-dichloropropane	2,000 ppm
95-50-1	1,2-dichlorobenzene	1,000 ppm
541-73-1	1,3-dichlorobenzene	400 ppm
71-43-2	benzene	4000* ppm
108-88-3	toluene	3700* ppm
100-41-4	ethylbenzene	1800* ppm
75-09-2	dichloromethane	6,900 ppm
106-46-7	1,4-dichlorobenzene	1,000 ppm
156-60-5	trans-dichloroethylene	1,700 ppm
108-90-7	chlorobenzene	400 ppm
71-55-6	1,1,1-trichloroethane	4,200 ppm
67-66-3	trichloromethane	3,200 ppm
79-01-6	trichloroethylene	3,800 ppm
124-48-1	dibromochloromethane	73 mg/m³
75-27-4	bromodichloromethane	85 mg/m³
75-25-2	bromoform	41 ppm

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 ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 6)

· **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.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

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

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
67-56-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI
108-10-1 4-methylpentan-2-one	
PEL	Long-term value: 410 mg/m³, 100 ppm
REL	Short-term value: 300 mg/m³, 75 ppm Long-term value: 205 mg/m³, 50 ppm
TLV	Short-term value: 307 mg/m³, 75 ppm Long-term value: 82 mg/m³, 20 ppm BEI
75-35-4 1,1-dichloroethylene	
REL	See Pocket Guide App.A
TLV	Long-term value: 20 mg/m³, 5 ppm
79-34-5 1,1,2,2-tetrachloroethane	
PEL	Long-term value: 35 mg/m³, 5 ppm Skin
REL	Long-term value: 7 mg/m³, 1 ppm Skin; See Pocket Guide Apps. A and C
TLV	Long-term value: 6.9 mg/m³, 1 ppm Skin
79-00-5 1,1,2-trichloroethane	
PEL	Long-term value: 45 mg/m³, 10 ppm Skin
REL	Long-term value: 45 mg/m³, 10 ppm Skin; See Pocket Guide Apps.A and C

(Contd. on page 8)

(Contd. of page 7)

TLV	Long-term value: 55 mg/m³, 10 ppm Skin
127-18-4 tetrachloroethylene	
PEL	Long-term value: 100 ppm Ceiling limit value: 200; 300* ppm *5-min peak in any 3 hrs
REL	Minimize workplace exp. concs.;Pocket Guide App. A
TLV	Short-term value: 685 mg/m³, 100 ppm Long-term value: 170 mg/m³, 25 ppm BEI
56-23-5 carbon tetrachloride	
PEL	Long-term value: 10 ppm Ceiling limit value: 25; 200* ppm *5-min peak in any 4 hrs
REL	Short-term value: 12.6* mg/m³, 2* ppm *60-min;See Pocket Guide App. A
TLV	Short-term value: 63 mg/m³, 10 ppm Long-term value: 31 mg/m³, 5 ppm Skin
107-06-2 1,2-dichloroethane	
PEL	Long-term value: 50 ppm Ceiling limit value: 100; 200* ppm *5-min peak in any 3 hrs
REL	Short-term value: 8 mg/m³, 2 ppm Long-term value: 4 mg/m³, 1 ppm See Pocket Guide Apps. A and C
TLV	Long-term value: 40 mg/m³, 10 ppm
71-43-2 benzene	
PEL	Short-term value: 15* mg/m³, 5* ppm Long-term value: 3* mg/m³, 1* ppm *table Z-2 for exclusions in 29CFR1910.1028(d)
REL	Short-term value: 1 ppm Long-term value: 0.1 ppm See Pocket Guide App. A
TLV	Short-term value: 8 mg/m³, 2.5 ppm Long-term value: 1.6 mg/m³, 0.5 ppm Skin; BEI
108-88-3 toluene	
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm
TLV	Long-term value: 75 mg/m³, 20 ppm BEI

(Contd. on page 9)

(Contd. of page 8)

100-41-4 ethylbenzene	
PEL	Long-term value: 435 mg/m³, 100 ppm
REL	Short-term value: 545 mg/m³, 125 ppm Long-term value: 435 mg/m³, 100 ppm
TLV	Long-term value: 87 mg/m³, 20 ppm BEI
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
106-46-7 1,4-dichlorobenzene	
PEL	Long-term value: 450 mg/m³, 75 ppm
REL	See Pocket Guide App. A
TLV	Long-term value: 60 mg/m³, 10 ppm
71-55-6 1,1,1-trichloroethane	
PEL	Long-term value: 1900 mg/m³, 350 ppm
REL	Ceiling limit value: 1900* mg/m³, 350* ppm *15-min; See Pocket Guide App. C
TLV	Short-term value: 2460 mg/m³, 450 ppm Long-term value: 1910 mg/m³, 350 ppm BEI
67-66-3 trichloromethane	
PEL	Ceiling limit value: 240 mg/m³, 50 ppm
REL	Short-term value: 9.78* mg/m³, 2* ppm *60-min; See Pocket Guide App. A
TLV	Long-term value: 49 mg/m³, 10 ppm
79-01-6 trichloroethylene	
PEL	Long-term value: 100 ppm Ceiling limit value: 200; 300* ppm *5-min peak in any 2 hrs
REL	See Pocket Guide Apps. A and C
TLV	Short-term value: 135 mg/m³, 25 ppm Long-term value: 54 mg/m³, 10 ppm BEI

· **Ingredients with biological limit values:**	
67-56-1 methanol	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Volatiles Sample (1X2 mL)

(Contd. of page 9)

108-10-1 4-methylpentan-2-one	
BEI	1 mg/L Medium: urine Time: end of shift Parameter: MIBK
127-18-4 tetrachloroethylene	
BEI	3 ppm Medium: end-exhaled air Time: prior to shift Parameter: Tetrachloroethylene 0.5 mg/L Medium: blood Time: prior to shift Parameter: Tetrachloroethylene
71-43-2 benzene	
BEI	25 µg/g creatinine Medium: urine Time: end of shift Parameter Parameter: S-Phenylmercapturic acid (background 500 µg/g creatinine Medium: urine Time: end of shift Parameter: t,t-Muconic acid (background)
108-88-3 toluene	
BEI	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)
100-41-4 ethylbenzene	
BEI	0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative) - Medium: end-exhaled air Time: not critical Parameter: Ethyl benzene (semi-quantitative)

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 10)

75-09-2 dichloromethane	
BEI	0.3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)
71-55-6 1,1,1-trichloroethane	
BEI	40 ppm Medium: end-exhaled air Time: prior to last shift of workweek Parameter: Methyl chloroform 10 mg/L Medium: urine Time: end of workweek Parameter: Trichloroacetic acid (nonspecific, semi-quantitative) 30 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Total trichloroethanol (nonspecific, semi-quantitative) 1 mg/L Medium: blood Time: end of shift at end of workweek Parameter: Total trichloroethanol (nonspecific)
79-01-6 trichloroethylene	
BEI	15 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Trichloroacetic acid (nonspecific) 0.5 mg/L Medium: blood Time: end of shift at end of workweek Parameter: Trichloroethanol without hydrolysis (nonspecific) - Medium: blood Time: end of shift at end of workweek Parameter: Trichloroethylene (semi-quantitative) - Medium: end-exhaled air Time: end of shift at end of workweek Parameter: Trichloroethylene (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.

(Contd. on page 12)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 11)

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:**

Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Colorless
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64.7 °C (148.5 °F)
· **Flash point:**	9 °C (48.2 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	455 °C (851 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.

(Contd. on page 13)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 12)

· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	5.5 Vol %
Upper:	44 Vol %
· **Vapor pressure at 20 °C (68 °F):**	100 hPa (75 mm Hg)
· **Density at 20 °C (68 °F):**	0.84204 g/cm³ (7.02682 lbs/gal)
· **Relative density**	Not determined.
· **Vapor 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:	96.8 %
VOC content:	95.88 % 807.3 g/l / 6.74 lb/gal
Solids content:	0.3 %
· **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.

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11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
Oral	LD50	25,288 mg/kg (rat)
Dermal	LD50	1,169 mg/kg
Inhalative	LC50/4 h	3.13 mg/L

(Contd. on page 14)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Volatiles Sample (1X2 mL)

(Contd. of page 13)

67-56-1 methanol		
Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)
108-10-1 4-methylpentan-2-one		
Oral	LD50	2,080 mg/kg (rat)
Dermal	LD50	16,000 mg/kg (rab)
		>16,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>8.2 mg/L (rat)
75-35-4 1,1-dichloroethylene		
Oral	LD50	200 mg/kg (rat)
Inhalative	LC50/4 h	6,350 mg/L (mouse)
79-34-5 1,1,2,2-tetrachloroethane		
Oral	LD50	200 mg/kg (rat)
79-00-5 1,1,2-trichloroethane		
Oral	LD50	836 mg/kg (rat)
127-18-4 tetrachloroethylene		
Oral	LD50	2,629 mg/kg (rat)
Inhalative	LC50/4 h	4,000 mg/L (rat)
56-23-5 carbon tetrachloride		
Oral	LD50	2,350 mg/kg (rat)
Dermal	LD50	5,070 mg/kg (rat)
107-06-2 1,2-dichloroethane		
Oral	LD50	670 mg/kg (rat)
Dermal	LD50	2,800 mg/kg (rat)
		2,800 mg/kg (rabbit)
95-50-1 1,2-dichlorobenzene		
Oral	LD50	500 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
71-43-2 benzene		
Oral	LD50	3,340 mg/kg (rat)
Dermal	LD50	48 mg/kg (mouse)
		>8,260 mg/kg (rabbit)
Inhalative	LC50/4 h	9,980 mg/L (mouse)
108-88-3 toluene		
Oral	LD50	5,580 mg/kg (rat)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	5,320 mg/L (mouse)
		28.1 mg/L (rat)
100-41-4 ethylbenzene		
Oral	LD50	3,500 mg/kg (rat)
Dermal	LD50	15,354 mg/kg (rabbit)

(Contd. on page 15)

(Contd. of page 14)

Inhalative	LC50/4 h	17.2 mg/L (rat)
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)
106-46-7 1,4-dichlorobenzene		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>5.07 mg/L (rat)
71-55-6 1,1,1-trichloroethane		
Oral	LD50	10,300 mg/kg (rat)
67-66-3 trichloromethane		
Oral	LD50	908 mg/kg (rat)
Dermal	LD50	75 mg/kg (rat)
		>20,000 mg/kg (rabbit)
79-01-6 trichloroethylene		
Oral	LD50	2,402 mg/kg (mouse)
		4,290 mg/kg (rat)
Dermal	LD50	8,450 mg/kg (mouse)
75-27-4 bromodichloromethane		
Oral	LD50	450 mg/kg (mouse)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** Sensitization possible through skin contact.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic
Harmful
Irritant
The product can cause inheritable damage.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
108-10-1	4-methylpentan-2-one	2B
75-35-4	1,1-dichloroethylene	3
79-34-5	1,1,2,2-tetrachloroethane	2B
79-00-5	1,1,2-trichloroethane	3
127-18-4	tetrachloroethylene	2A
56-23-5	carbon tetrachloride	2B
107-06-2	1,2-dichloroethane	2B
78-87-5	1,2-dichloropropane	1
95-50-1	1,2-dichlorobenzene	3
541-73-1	1,3-dichlorobenzene	3

(Contd. on page 16)

(Contd. of page 15)

71-43-2	benzene	1
108-88-3	toluene	3
100-41-4	ethylbenzene	2B
75-09-2	dichloromethane	2A
106-46-7	1,4-dichlorobenzene	2B
71-55-6	1,1,1-trichloroethane	3
67-66-3	trichloromethane	2B
79-01-6	trichloroethylene	1
124-48-1	dibromochloromethane	3
75-27-4	bromodichloromethane	2B
75-25-2	bromoform	3

· **NTP (National Toxicology Program)**

127-18-4	tetrachloroethylene	R
56-23-5	carbon tetrachloride	R
107-06-2	1,2-dichloroethane	R
71-43-2	benzene	K
75-09-2	dichloromethane	R
106-46-7	1,4-dichlorobenzene	R
67-66-3	trichloromethane	R
79-01-6	trichloroethylene	K
75-27-4	bromodichloromethane	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

71-43-2	benzene
75-09-2	dichloromethane

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **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 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely 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.

(Contd. on page 17)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 16)

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

· **UN-Number**	
· **DOT, IMDG, IATA**	UN1230
· **UN proper shipping name**	
· **DOT**	Methanol solution
· **IMDG, IATA**	METHANOL solution
· **Transport hazard class(es)**	
· **DOT**	
· **Class**	3 Flammable liquids
· **Label**	3, 6.1
· **IMDG**	
· **Class**	3 Flammable liquids
· **Label**	3/6.1
· **IATA**	
· **Class**	3 Flammable liquids
· **Label**	3 (6.1)
· **Packing group**	
· **DOT, 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**	B

(Contd. on page 18)

(Contd. of page 17)

· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L
· **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

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15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**	
67-66-3	trichloromethane

· **Section 313 (Specific toxic chemical listings):**	
67-56-1	methanol
108-10-1	4-methylpentan-2-one
75-35-4	1,1-dichloroethylene
79-34-5	1,1,2,2-tetrachloroethane
79-00-5	1,1,2-trichloroethane
127-18-4	tetrachloroethylene
56-23-5	carbon tetrachloride
107-06-2	1,2-dichloroethane
78-87-5	1,2-dichloropropane
95-50-1	1,2-dichlorobenzene
541-73-1	1,3-dichlorobenzene
71-43-2	benzene
108-88-3	toluene
100-41-4	ethylbenzene
75-09-2	dichloromethane
106-46-7	1,4-dichlorobenzene
108-90-7	chlorobenzene
71-55-6	1,1,1-trichloroethane
67-66-3	trichloromethane
79-01-6	trichloroethylene

(Contd. on page 19)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Volatiles Sample (1X2 mL)

(Contd. of page 18)

75-27-4	bromodichloromethane
75-25-2	bromoform

· **TSCA (Toxic Substances Control Act):**		
67-56-1	methanol	ACTIVE
108-10-1	4-methylpentan-2-one	ACTIVE
75-35-4	1,1-dichloroethylene	ACTIVE
79-34-5	1,1,2,2-tetrachloroethane	ACTIVE
79-00-5	1,1,2-trichloroethane	ACTIVE
127-18-4	tetrachloroethylene	ACTIVE
56-23-5	carbon tetrachloride	ACTIVE
107-06-2	1,2-dichloroethane	ACTIVE
78-87-5	1,2-dichloropropane	ACTIVE
95-50-1	1,2-dichlorobenzene	ACTIVE
541-73-1	1,3-dichlorobenzene	ACTIVE
71-43-2	benzene	ACTIVE
108-88-3	toluene	ACTIVE
100-41-4	ethylbenzene	ACTIVE
75-09-2	dichloromethane	ACTIVE
106-46-7	1,4-dichlorobenzene	ACTIVE
156-60-5	trans-dichloroethylene	ACTIVE
108-90-7	chlorobenzene	ACTIVE
71-55-6	1,1,1-trichloroethane	ACTIVE
67-66-3	trichloromethane	ACTIVE
79-01-6	trichloroethylene	ACTIVE
124-48-1	dibromochloromethane	ACTIVE
75-27-4	bromodichloromethane	ACTIVE
75-25-2	bromoform	ACTIVE

· **Hazardous Air Pollutants**	
67-56-1	methanol
108-10-1	4-methylpentan-2-one
75-35-4	1,1-dichloroethylene
79-34-5	1,1,2,2-tetrachloroethane
79-00-5	1,1,2-trichloroethane
127-18-4	tetrachloroethylene
56-23-5	carbon tetrachloride
107-06-2	1,2-dichloroethane
78-87-5	1,2-dichloropropane
71-43-2	benzene
108-88-3	toluene
100-41-4	ethylbenzene
75-09-2	dichloromethane

(Contd. on page 20)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 19)

106-46-7	1,4-dichlorobenzene
108-90-7	chlorobenzene
71-55-6	1,1,1-trichloroethane
67-66-3	trichloromethane
79-01-6	trichloroethylene
75-25-2	bromoform

· **Proposition 65**

· **Chemicals known to cause cancer:**	
108-10-1	4-methylpentan-2-one
75-35-4	1,1-dichloroethylene
79-34-5	1,1,2,2-tetrachloroethane
79-00-5	1,1,2-trichloroethane
127-18-4	tetrachloroethylene
56-23-5	carbon tetrachloride
107-06-2	1,2-dichloroethane
78-87-5	1,2-dichloropropane
71-43-2	benzene
100-41-4	ethylbenzene
75-09-2	dichloromethane
106-46-7	1,4-dichlorobenzene
67-66-3	trichloromethane
79-01-6	trichloroethylene
75-27-4	bromodichloromethane
75-25-2	bromoform

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**	
71-43-2	benzene
79-01-6	trichloroethylene

· **Chemicals known to cause developmental toxicity:**	
67-56-1	methanol
108-10-1	4-methylpentan-2-one
71-43-2	benzene
108-88-3	toluene
67-66-3	trichloromethane
79-01-6	trichloroethylene

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**		
108-10-1	4-methylpentan-2-one	I
75-35-4	1,1-dichloroethylene	C, S (inh.), I (oral)
79-34-5	1,1,2,2-tetrachloroethane	L

(Contd. on page 21)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Volatiles Sample (1X2 mL)

(Contd. of page 20)

79-00-5	1,1,2-trichloroethane	C
127-18-4	tetrachloroethylene	L
56-23-5	carbon tetrachloride	L
107-06-2	1,2-dichloroethane	B2
95-50-1	1,2-dichlorobenzene	D
541-73-1	1,3-dichlorobenzene	D
71-43-2	benzene	A, K/L
108-88-3	toluene	II
100-41-4	ethylbenzene	D
75-09-2	dichloromethane	L
156-60-5	trans-dichloroethylene	II
108-90-7	chlorobenzene	D
71-55-6	1,1,1-trichloroethane	II
67-66-3	trichloromethane	B2, L, NL
79-01-6	trichloroethylene	CaH
124-48-1	dibromochloromethane	C
75-27-4	bromodichloromethane	B2
75-25-2	bromoform	B2

· **TLV (Threshold Limit Value established by ACGIH)**

75-35-4	1,1-dichloroethylene	A4
79-34-5	1,1,2,2-tetrachloroethane	A3
79-00-5	1,1,2-trichloroethane	A3
127-18-4	tetrachloroethylene	A3
56-23-5	carbon tetrachloride	A2
107-06-2	1,2-dichloroethane	A4
78-87-5	1,2-dichloropropane	A4
95-50-1	1,2-dichlorobenzene	A4
71-43-2	benzene	A1
108-88-3	toluene	A4
100-41-4	ethylbenzene	A3
75-09-2	dichloromethane	A3
106-46-7	1,4-dichlorobenzene	A3
108-90-7	chlorobenzene	A3
71-55-6	1,1,1-trichloroethane	A4
67-66-3	trichloromethane	A3
79-01-6	trichloroethylene	A2
75-25-2	bromoform	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

79-34-5	1,1,2,2-tetrachloroethane
79-00-5	1,1,2-trichloroethane
127-18-4	tetrachloroethylene

(Contd. on page 22)

(Contd. of page 21)

56-23-5	carbon tetrachloride
107-06-2	1,2-dichloroethane
78-87-5	1,2-dichloropropane
71-43-2	benzene
75-09-2	dichloromethane
106-46-7	1,4-dichlorobenzene
67-66-3	trichloromethane
79-01-6	trichloroethylene

· **National regulations:**
· **Additional classification according to Decree on Hazardous Materials:**
Carcinogenic hazardous material group III (dangerous).

· **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** 05/28/2019 / 2
· **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
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 1B: Germ cell mutagenicity – Category 1B
Carc. 1A: Carcinogenicity – Category 1A
Repr. 2: Reproductive toxicity – Category 2
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

(Contd. on page 23)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck Volatiles Sample (1X2 mL)

(Contd. of page 22)

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· *** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

*
1 Identification

· **Product identifier**

· **Trade name: QualityCheck Pesticides Sample (1X2 mL)**

· **Part number:** QCM-200
· **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**


GHS02 Flame

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


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
· **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Causes damage to organs.

(Contd. on page 2)

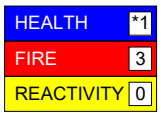
Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 1)

· **Precautionary statements**
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/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 on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep 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.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *1
Fire = 3
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.

· **Dangerous components:**		
67-56-1	methanol	99.965%

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Pesticides Sample (1X2 mL)

(Contd. of page 2)

Remove breathing apparatus 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.
· **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, extinguishing 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.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
67-56-1	methanol	530 ppm
72-20-8	endrin (ISO)	1.8 mg/m³
58-89-9	γ -HCH or γ -BHC	9.1 mg/m³
72-43-5	methoxychlor	30 mg/m³
60-57-1	dieldrin (ISO)	0.3 mg/m³
309-00-2	aldrin (ISO)	0.91 mg/m³
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	6.5 mg/m³
50-29-3	DDT (common name not adopted by ISO)	3 mg/m³

(Contd. on page 4)

(Contd. of page 3)

72-54-8	TDE	2.4 mg/m³
76-44-8	heptachlor (ISO)	0.15 mg/m³
1024-57-3	heptachlor epoxide - isomer B	0.15 mg/m³

· **PAC-2:**

67-56-1	methanol	2,100 ppm
72-20-8	endrin (ISO)	20 mg/m³
58-89-9	γ -HCH or γ -BHC	100 mg/m³
72-43-5	methoxychlor	150 mg/m³
60-57-1	dieldrin (ISO)	6.8 mg/m³
309-00-2	aldrin (ISO)	10 mg/m³
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	72 mg/m³
50-29-3	DDT (common name not adopted by ISO)	34 mg/m³
72-54-8	TDE	26 mg/m³
76-44-8	heptachlor (ISO)	14 mg/m³
1024-57-3	heptachlor epoxide - isomer B	0.5 mg/m³

· **PAC-3:**

67-56-1	methanol	7200* ppm
72-20-8	endrin (ISO)	2,000 mg/m³
58-89-9	γ -HCH or γ -BHC	1,000 mg/m³
72-43-5	methoxychlor	4,500 mg/m³
60-57-1	dieldrin (ISO)	450 mg/m³
309-00-2	aldrin (ISO)	100 mg/m³
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	170 mg/m³
50-29-3	DDT (common name not adopted by ISO)	210 mg/m³
72-54-8	TDE	160 mg/m³
76-44-8	heptachlor (ISO)	700 mg/m³
1024-57-3	heptachlor epoxide - isomer B	3 mg/m³

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 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.

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 4)

· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **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 with limit values that require monitoring at the workplace:**	
67-56-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI

· **Ingredients with biological limit values:**	
67-56-1 methanol	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

· **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.
· **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

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 5)

· **Penetration time of glove material**
For normal use: nitrile rubber: 1 hour
For direct contact with the chemical: butyl rubber: >4 hours
· **Eye protection:**

Tightly sealed goggles

*

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Colorless
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64.7 °C (148.5 °F)
· **Flash point:**	9 °C (48.2 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	455 °C (851 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	5.5 Vol %
Upper:	44 Vol %
· **Vapor pressure at 20 °C (68 °F):**	100 hPa (75 mm Hg)
· **Density at 20 °C (68 °F):**	0.8 g/cm³ (6.676 lbs/gal)
· **Relative density**	Not determined.
· **Vapor 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.

(Contd. on page 7)

(Contd. of page 6)

Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	100.0 %
VOC content:	99.97 % 999.7 g/l / 8.34 lb/gal
Solids content:	0.0 %
· **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 that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
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:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
72-20-8	endrin (ISO)	3
319-84-6	alpha-BHC (alpha-HCH)	2B
319-85-7	(1alpha,2ß,3alpha,4ß,5alpha,6ß)-1,2,3,4,5,6-hexachlorocyclohexane	2B
58-89-9	γ -HCH or γ -BHC	1
72-43-5	methoxychlor	3
60-57-1	dieldrin (ISO)	3

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck Pesticides Sample (1X2 mL)

(Contd. of page 7)

309-00-2	aldrin (ISO)	3
50-29-3	DDT (common name not adopted by ISO)	2A
76-44-8	heptachlor (ISO)	2B
1024-57-3	heptachlor epoxide - isomer B	2B

· **NTP (National Toxicology Program)**

319-84-6	alpha-BHC (alpha-HCH)	R
319-85-7	(1alpha,2ß,3alpha,4ß,5alpha,6ß)-1,2,3,4,5,6-hexachlorocyclohexane	R
319-86-8	delta-BHC (delta-HCH)	R
58-89-9	γ -HCH or γ -BHC	R
50-29-3	DDT (common name not adopted by ISO)	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **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 1 (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.
· **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

· **UN-Number**
· **DOT, IMDG, IATA** UN1230

· **UN proper shipping name**
· **DOT** Methanol solution

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck Pesticides Sample (1X2 mL)

(Contd. of page 8)

· **IMDG**	METHANOL solution
· **IATA**	METHANOL mixture

· **Transport hazard class(es)**

· **DOT**

· **Class**	3 Flammable liquids
· **Label**	3, 6.1

· **IMDG**

· **Class**	3 Flammable liquids
· **Label**	3/6.1

· **IATA**

· **Class**	3 Flammable liquids
· **Label**	3 (6.1)
· **Packing group**	
· **DOT, 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**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L
· **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

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Pesticides Sample (1X2 mL)

(Contd. of page 9)

· **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**
· **Sara**

· **Section 355 (extremely hazardous substances):**	
72-20-8	endrin (ISO)
58-89-9	γ -HCH or γ -BHC
309-00-2	aldrin (ISO)

· **Section 313 (Specific toxic chemical listings):**	
67-56-1	methanol
319-84-6	alpha-BHC (alpha-HCH)
58-89-9	γ -HCH or γ -BHC
72-43-5	methoxychlor
309-00-2	aldrin (ISO)
76-44-8	heptachlor (ISO)

· **TSCA (Toxic Substances Control Act):**		
67-56-1	methanol	ACTIVE
319-84-6	alpha-BHC (alpha-HCH)	ACTIVE
319-85-7	(1alpha,2ß,3alpha,4ß,5alpha,6ß)-1,2,3,4,5,6-hexachlorocyclohexane	ACTIVE
319-86-8	delta-BHC (delta-HCH)	ACTIVE
58-89-9	γ -HCH or γ -BHC	ACTIVE
50-29-3	DDT (common name not adopted by ISO)	ACTIVE

· **Hazardous Air Pollutants**	
67-56-1	methanol
58-89-9	γ -HCH or γ -BHC
72-43-5	methoxychlor
76-44-8	heptachlor (ISO)

· **Proposition 65**

· **Chemicals known to cause cancer:**	
319-84-6	alpha-BHC (alpha-HCH)
319-85-7	(1alpha,2ß,3alpha,4ß,5alpha,6ß)-1,2,3,4,5,6-hexachlorocyclohexane
319-86-8	delta-BHC (delta-HCH)
58-89-9	γ -HCH or γ -BHC
60-57-1	dieldrin (ISO)
309-00-2	aldrin (ISO)
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene
50-29-3	DDT (common name not adopted by ISO)
72-54-8	TDE

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Pesticides Sample (1X2 mL)

(Contd. of page 10)

76-44-8	heptachlor (ISO)
1024-57-3	heptachlor epoxide - isomer B

· **Chemicals known to cause reproductive toxicity for females:**

50-29-3	DDT (common name not adopted by ISO)

· **Chemicals known to cause reproductive toxicity for males:**

72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene
50-29-3	DDT (common name not adopted by ISO)

· **Chemicals known to cause developmental toxicity:**

67-56-1	methanol
72-20-8	endrin (ISO)
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene
50-29-3	DDT (common name not adopted by ISO)
76-44-8	heptachlor (ISO)

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

72-20-8	endrin (ISO)	D
319-84-6	alpha-BHC (alpha-HCH)	B2
319-85-7	(1alpha,2ß,3alpha,4ß,5alpha,6ß)-1,2,3,4,5,6-hexachlorocyclohexane	C
319-86-8	delta-BHC (delta-HCH)	D
72-43-5	methoxychlor	D
60-57-1	dieldrin (ISO)	B2
309-00-2	aldrin (ISO)	B2
72-55-9	2,2-bis(p-chlorophenyl)-1,1-dichloroethylene	B2
50-29-3	DDT (common name not adopted by ISO)	B2
72-54-8	TDE	B2
76-44-8	heptachlor (ISO)	B2
1024-57-3	heptachlor epoxide - isomer B	B2

· **TLV (Threshold Limit Value established by ACGIH)**

72-20-8	endrin (ISO)	A4
58-89-9	γ -HCH or γ -BHC	A3
72-43-5	methoxychlor	A4
60-57-1	dieldrin (ISO)	(A4)
309-00-2	aldrin (ISO)	A3
50-29-3	DDT (common name not adopted by ISO)	A3
76-44-8	heptachlor (ISO)	A3
1024-57-3	heptachlor epoxide - isomer B	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

72-43-5	methoxychlor
60-57-1	dieldrin (ISO)
309-00-2	aldrin (ISO)
50-29-3	DDT (common name not adopted by ISO)

(Contd. on page 12)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 11)

76-44-8	heptachlor (ISO)

· **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** 05/28/2019 / 2
· **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
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
· *** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

*
1 Identification

· **Product identifier**

· **Trade name: QualityCheck Toxaphene Sample (1X2 mL)**

· **Part number:** QCM-220
· **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**


GHS02 Flame

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


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
· **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Causes damage to organs.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

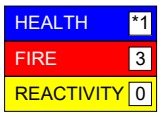
Trade name: QualityCheck Toxaphene Sample (1X2 mL)

(Contd. of page 1)

· **Precautionary statements**
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/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 on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep 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.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *1
Fire = 3
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.

· **Dangerous components:**		
67-56-1	methanol	99.998%

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.

(Contd. on page 3)

(Contd. of page 2)

Remove breathing apparatus 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.
· **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, extinguishing 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.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
67-56-1	methanol	530 ppm
8001-35-2	Toxaphene	1 mg/m³

· **PAC-2:**		
67-56-1	methanol	2,100 ppm
8001-35-2	Toxaphene	20 mg/m³

· **PAC-3:**		
67-56-1	methanol	7200* ppm

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 3)

8001-35-2	Toxaphene	200 mg/m³

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 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.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **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 with limit values that require monitoring at the workplace:**	
67-56-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI

· **Ingredients with biological limit values:**	
67-56-1 methanol	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

· **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.

(Contd. on page 5)

(Contd. of page 4)

Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.

· **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:**

Tightly sealed goggles

*

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Colorless
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64.7 °C (148.5 °F)
· **Flash point:**	9 °C (48.2 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	455 °C (851 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 5)

· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	5.5 Vol %
Upper:	44 Vol %
· **Vapor pressure at 20 °C (68 °F):**	100 hPa (75 mm Hg)
· **Density at 20 °C (68 °F):**	0.80002 g/cm³ (6.67617 lbs/gal)
· **Relative density**	Not determined.
· **Vapor 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 %
VOC content:	100.00 % 800.0 g/l / 6.68 lb/gal
Solids content:	0.0 %
· **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 that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
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)

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 6)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
8001-35-2	Toxaphene	2B

· **NTP (National Toxicology Program)**		
8001-35-2	Toxaphene	R

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **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 1 (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.
· **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

· **UN-Number**
· **DOT, IMDG, IATA** UN1230

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Toxaphene Sample (1X2 mL)

(Contd. of page 7)

· **UN proper shipping name**	
· **DOT**	Methanol solution
· **IMDG**	METHANOL solution
· **IATA**	METHANOL mixture

· **Transport hazard class(es)**

· **DOT**

· **Class**	3 Flammable liquids
· **Label**	3, 6.1

· **IMDG**

· **Class**	3 Flammable liquids
· **Label**	3/6.1

· **IATA**

· **Class**	3 Flammable liquids
· **Label**	3 (6.1)
· **Packing group**	
· **DOT, 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**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L

· **IMDG**

· **Limited quantities (LQ)**	1L

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 8)

· **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**
· **Sara**

· **Section 355 (extremely hazardous substances):**

8001-35-2	Toxaphene

· **Section 313 (Specific toxic chemical listings):**

All ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

67-56-1	methanol	ACTIVE

· **Hazardous Air Pollutants**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

8001-35-2	Toxaphene

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

67-56-1	methanol

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

8001-35-2	Toxaphene	B2

· **TLV (Threshold Limit Value established by ACGIH)**

8001-35-2	Toxaphene	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

8001-35-2	Toxaphene

· **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** 05/28/2019 / 2

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck Toxaphene Sample (1X2 mL)

(Contd. of page 9)

· **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
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
· *** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

*
1 Identification

· **Product identifier**

· **Trade name: QualityCheck Chlordane Sample (1X2 mL)**

· **Part number:** QCM-230
· **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**


GHS02 Flame

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


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
· **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Causes damage to organs.

(Contd. on page 2)

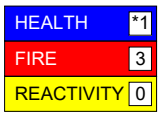
Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 1)

· **Precautionary statements**
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/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 on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep 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.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *1
Fire = 3
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.

· **Dangerous components:**		
67-56-1	methanol	99.998%

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Chlordane Sample (1X2 mL)

(Contd. of page 2)

Remove breathing apparatus 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.
· **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, extinguishing 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.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
67-56-1	methanol	530 ppm
57-74-9	chlordane (ISO)	4.5 mg/m³

· **PAC-2:**		
67-56-1	methanol	2,100 ppm
57-74-9	chlordane (ISO)	50 mg/m³

· **PAC-3:**		
67-56-1	methanol	7200* ppm

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 3)

57-74-9	chlordane (ISO)	500 mg/m³

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 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.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **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 with limit values that require monitoring at the workplace:**	
67-56-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI

· **Ingredients with biological limit values:**	
67-56-1 methanol	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

· **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.

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 4)

Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.

· **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:**

Tightly sealed goggles

*
9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Colorless
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64.7 °C (148.5 °F)
· **Flash point:**	9 °C (48.2 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	455 °C (851 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.

(Contd. on page 6)

(Contd. of page 5)

· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	5.5 Vol %
Upper:	44 Vol %
· **Vapor pressure at 20 °C (68 °F):**	100 hPa (75 mm Hg)
· **Density at 20 °C (68 °F):**	0.80002 g/cm³ (6.67617 lbs/gal)
· **Relative density**	Not determined.
· **Vapor 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 %
VOC content:	100.00 % 800.0 g/l / 6.68 lb/gal
Solids content:	0.0 %
· **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 that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
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)

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 6)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
57-74-9	chlordane (ISO)	2B

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **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 1 (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.
· **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

· **UN-Number**	
· **DOT, IMDG, IATA**	UN1230

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck Chlordane Sample (1X2 mL)

(Contd. of page 7)

· **UN proper shipping name**	
· **DOT**	Methanol solution
· **IMDG**	METHANOL solution
· **IATA**	METHANOL mixture

· **Transport hazard class(es)**

· **DOT**

· **Class**	3 Flammable liquids
· **Label**	3, 6.1

· **IMDG**

· **Class**	3 Flammable liquids
· **Label**	3/6.1

· **IATA**

· **Class**	3 Flammable liquids
· **Label**	3 (6.1)
· **Packing group**	
· **DOT, 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**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L
· **IMDG**	
· **Limited quantities (LQ)**	1L

(Contd. on page 9)

(Contd. of page 8)

· **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**
· **Sara**

· **Section 355 (extremely hazardous substances):**

57-74-9	chlordane (ISO)

· **Section 313 (Specific toxic chemical listings):**

All ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

67-56-1	methanol	ACTIVE

· **Hazardous Air Pollutants**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

57-74-9	chlordane (ISO)

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

67-56-1	methanol

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

57-74-9	chlordane (ISO)	B2

· **TLV (Threshold Limit Value established by ACGIH)**

57-74-9	chlordane (ISO)	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

57-74-9	chlordane (ISO)

· **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** 05/28/2019 / 2

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck Chlordane Sample (1X2 mL)

(Contd. of page 9)

· **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
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
· *** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

*
1 Identification

· **Product identifier**

· **Trade name: QualityCheck PCBs Sample (1X2 mL)**

· **Part number:** QCM-240
· **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**


GHS02 Flame

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


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
· **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Causes damage to organs.

(Contd. on page 2)

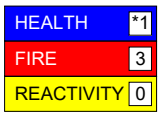
Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 1)

· **Precautionary statements**
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/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 on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep 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.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *1
Fire = 3
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.

· **Dangerous components:**		
67-56-1	methanol	99.991%

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 2)

Remove breathing apparatus 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.
· **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, extinguishing 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.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
67-56-1	methanol	530 ppm
11104-28-2	Aroclor 1221 (PCB 1221)	12 mg/m³
11141-16-5	Aroclor 1232 (PCB 1232)	13 mg/m³
12672-29-6	Aroclor 1248 (PCB 1248)	6.6 mg/m³
11097-69-1	Aroclor 1254 (PCB 1254)	1.5 mg/m³
53469-21-9	Aroclor 1242 (PCB 1242)	3 mg/m³
11096-82-5	aroclor 1260	0.41 mg/m³
12674-11-2	Aroclor 1016 (PCB 1016)	5.6 mg/m³

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 3)

· **PAC-2:**		
67-56-1	methanol	2,100 ppm
11104-28-2	Aroclor 1221 (PCB 1221)	130 mg/m³
11141-16-5	Aroclor 1232 (PCB 1232)	150 mg/m³
12672-29-6	Aroclor 1248 (PCB 1248)	72 mg/m³
11097-69-1	Aroclor 1254 (PCB 1254)	68 mg/m³
53469-21-9	Aroclor 1242 (PCB 1242)	140 mg/m³
11096-82-5	aroclor 1260	4.5 mg/m³
12674-11-2	Aroclor 1016 (PCB 1016)	62 mg/m³

· **PAC-3:**		
67-56-1	methanol	7200* ppm
11104-28-2	Aroclor 1221 (PCB 1221)	790 mg/m³
11141-16-5	Aroclor 1232 (PCB 1232)	890 mg/m³
12672-29-6	Aroclor 1248 (PCB 1248)	2,200 mg/m³
11097-69-1	Aroclor 1254 (PCB 1254)	200 mg/m³
53469-21-9	Aroclor 1242 (PCB 1242)	840 mg/m³
11096-82-5	aroclor 1260	260 mg/m³
12674-11-2	Aroclor 1016 (PCB 1016)	460 mg/m³

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 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.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **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.

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 4)

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
67-56-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI

· **Ingredients with biological limit values:**	
67-56-1 methanol	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

· **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.
· **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

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 5)

· **Eye protection:**

Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Colorless
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64.7 °C (148.5 °F)
· **Flash point:**	9 °C (48.2 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	455 °C (851 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	5.5 Vol %
Upper:	44 Vol %
· **Vapor pressure at 20 °C (68 °F):**	100 hPa (75 mm Hg)
· **Density at 20 °C (68 °F):**	0.8 g/cm³ (6.676 lbs/gal)
· **Relative density**	Not determined.
· **Vapor 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.

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 6)

· **Solvent content:**	
Organic solvents:	100.0 %
VOC content:	99.99 % 999.9 g/l / 8.34 lb/gal
Solids content:	0.0 %
· **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 that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
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:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
11097-69-1	Aroclor 1254 (PCB 1254)	2A
53469-21-9	Aroclor 1242 (PCB 1242)	2A

· **NTP (National Toxicology Program)**		
11097-69-1	Aroclor 1254 (PCB 1254)	R
11096-82-5	aroclor 1260	R
12674-11-2	Aroclor 1016 (PCB 1016)	R

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 7)

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **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 1 (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.
· **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

· **UN-Number**	
· **DOT, IMDG, IATA**	UN1230
· **UN proper shipping name**	
· **DOT**	Methanol solution
· **IMDG, IATA**	METHANOL solution
· **Transport hazard class(es)**	
· **DOT**	

· **Class**	3 Flammable liquids

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck PCBs Sample (1X2 mL)

(Contd. of page 8)

· **Label**	3, 6.1
· **IMDG**	
	
· **Class**	3 Flammable liquids
· **Label**	3/6.1
· **IATA**	
	
· **Class**	3 Flammable liquids
· **Label**	3 (6.1)
· **Packing group**	
· **DOT, 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**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L
· **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

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15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

(Contd. on page 10)

(Contd. of page 9)

· **Section 313 (Specific toxic chemical listings):**

67-56-1	methanol

· **TSCA (Toxic Substances Control Act):**

67-56-1	methanol	ACTIVE

· **Hazardous Air Pollutants**

67-56-1	methanol

· **Proposition 65**

· **Chemicals known to cause cancer:**

11096-82-5	aroclor 1260

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

67-56-1	methanol

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

11097-69-1	Aroclor 1254 (PCB 1254)	B2
53469-21-9	Aroclor 1242 (PCB 1242)	B2

· **TLV (Threshold Limit Value established by ACGIH)**

11097-69-1	Aroclor 1254 (PCB 1254)	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

11097-69-1	Aroclor 1254 (PCB 1254)
53469-21-9	Aroclor 1242 (PCB 1242)

· **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** 05/28/2019 / 2
· **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

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 04/29/2019

Trade name: QualityCheck PCBs Sample (1X2 mL)

(Contd. of page 10)

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
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

· *** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 4 Reviewed on 04/29/2019

*
1 Identification

· **Product identifier**

· **Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)**

· **Part number:** QCM-300
· **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**


GHS02 Flame

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


GHS08 Health hazard

Carc. 1B H350 May cause cancer.


GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
acetone
dibenz[a,h]anthracene
benzo[a]pyrene
· **Hazard statements**
Highly flammable liquid and vapor.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 1)

Causes serious eye irritation.
May cause cancer.
May cause drowsiness or dizziness.

· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
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.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
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.

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

Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *2
Fire = 3
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.

· **Dangerous components:**

67-64-1	acetone	99.342%

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 2)

53-70-3	dibenz[a,h]anthracene	0.0253%
50-32-8	benzo[a]pyrene	0.0253%

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4 First-aid measures

· **Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** Immediately rinse with water.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, 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, extinguishing 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** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
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.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
67-64-1	acetone	200 ppm
101-55-3	4-bromophenyl phenyl ether	0.33 mg/m³
132-64-9	dibenzofuran	30 mg/m³
95-50-1	1,2-dichlorobenzene	50 ppm
106-46-7	1,4-dichlorobenzene	30 ppm

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 3)

131-11-3	dimethyl phthalate	15 mg/m³
121-14-2	2,4-dinitrotoluene	0.6 mg/m³
117-84-0	dioctyl phthalate	41 mg/m³
118-74-1	hexachlorobenzene	0.006 mg/m³
98-95-3	nitrobenzene	3 ppm
120-82-1	1,2,4-trichlorobenzene	0.45 ppm
91-20-3	naphthalene	15 ppm
129-00-0	pyrene	0.15 mg/m³
120-12-7	anthracene	48 mg/m³
85-01-8	phenanthrene	5.4 mg/m³
206-44-0	fluoranthene	8.2 mg/m³
83-32-9	acenaphthene	3.6 mg/m³
53-70-3	dibenz[a,h]anthracene	0.093 mg/m³
218-01-9	chrysene	0.6 mg/m³
205-99-2	benz[e]acephenanthrylene	0.12 mg/m³
50-32-8	benzo[a]pyrene	0.6 mg/m³
56-55-3	benz[a]anthracene	0.6 mg/m³
191-24-2	benzo[ghi]perylene	30 mg/m³
117-81-7	di-(2-ethylhexyl) phthalate	10 mg/m³
85-68-7	BBP	15 mg/m³
84-66-2	diethyl phthalate	15 mg/m³
78-59-1	3,5,5-trimethylcyclohex-2-enone	12 ppm
· **PAC-2:**		
67-64-1	acetone	3200* ppm
101-55-3	4-bromophenyl phenyl ether	3.6 mg/m³
132-64-9	dibenzofuran	330 mg/m³
95-50-1	1,2-dichlorobenzene	170 ppm
106-46-7	1,4-dichlorobenzene	170 ppm
131-11-3	dimethyl phthalate	1,600 mg/m³
121-14-2	2,4-dinitrotoluene	12 mg/m³
117-84-0	dioctyl phthalate	450 mg/m³
118-74-1	hexachlorobenzene	14 mg/m³
98-95-3	nitrobenzene	20 ppm
120-82-1	1,2,4-trichlorobenzene	5 ppm
91-20-3	naphthalene	83 ppm
129-00-0	pyrene	1.7 mg/m³
120-12-7	anthracene	530 mg/m³
85-01-8	phenanthrene	59 mg/m³
206-44-0	fluoranthene	90 mg/m³
83-32-9	acenaphthene	40 mg/m³
53-70-3	dibenz[a,h]anthracene	1 mg/m³

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 4)

218-01-9	chrysene	12 mg/m³
205-99-2	benz[e]acephenanthrylene	1.3 mg/m³
50-32-8	benzo[a]pyrene	120 mg/m³
56-55-3	benz[a]anthracene	120 mg/m³
191-24-2	benzo[ghi]perylene	330 mg/m³
117-81-7	di-(2-ethylhexyl) phthalate	1,000 mg/m³
85-68-7	BBP	77 mg/m³
84-66-2	diethyl phthalate	300 mg/m³
78-59-1	3,5,5-trimethylcyclohex-2-enone	33 ppm

· **PAC-3:**

67-64-1	acetone	5700* ppm
101-55-3	4-bromophenyl phenyl ether	21 mg/m³
132-64-9	dibenzofuran	2,000 mg/m³
95-50-1	1,2-dichlorobenzene	1,000 ppm
106-46-7	1,4-dichlorobenzene	1,000 ppm
131-11-3	dimethyl phthalate	9300* mg/m³
121-14-2	2,4-dinitrotoluene	200 mg/m³
117-84-0	dioctyl phthalate	11000* mg/m³
118-74-1	hexachlorobenzene	91 mg/m³
98-95-3	nitrobenzene	200 ppm
120-82-1	1,2,4-trichlorobenzene	20 ppm
91-20-3	naphthalene	500 ppm
129-00-0	pyrene	110 mg/m³
120-12-7	anthracene	3,200 mg/m³
85-01-8	phenanthrene	360 mg/m³
206-44-0	fluoranthene	400 mg/m³
83-32-9	acenaphthene	240 mg/m³
53-70-3	dibenz[a,h]anthracene	2.9 mg/m³
218-01-9	chrysene	69 mg/m³
205-99-2	benz[e]acephenanthrylene	7.9 mg/m³
50-32-8	benzo[a]pyrene	700 mg/m³
56-55-3	benz[a]anthracene	700 mg/m³
191-24-2	benzo[ghi]perylene	2,000 mg/m³
117-81-7	di-(2-ethylhexyl) phthalate	6,100 mg/m³
85-68-7	BBP	460 mg/m³
84-66-2	diethyl phthalate	1,800 mg/m³
78-59-1	3,5,5-trimethylcyclohex-2-enone	200 ppm

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 5)

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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 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.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **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 with limit values that require monitoring at the workplace:**	
67-64-1 acetone	
PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: 1187 mg/m³, 500 ppm Long-term value: 594 mg/m³, 250 ppm BEI
50-32-8 benzo[a]pyrene	
PEL	Long-term value: 0.2 mg/m³ see Coal tar pitch volatiles
REL	Long-term value: 0.1 mg/m³ Coal tar pitch volatile; Pocket Guide Apps. A+C
TLV	L; BEIp

· **Ingredients with biological limit values:**	
67-64-1 acetone	
BEI	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 6)

50-32-8 benzo[a]pyrene	
BEI	- Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)

· **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.
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:**

Tightly sealed goggles

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9 Physical and chemical properties

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

Form:	Fluid
Color:	Colorless
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.

(Contd. on page 8)

(Contd. of page 7)

· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-94.7 °C (-138.5 °F)
Boiling point/Boiling range:	55.8-56.6 °C (132.4-133.9 °F)
· **Flash point:**	-17 °C (1.4 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	465 °C (869 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	2.6 Vol %
Upper:	13 Vol %
· **Vapor pressure at 20 °C (68 °F):**	245.3 hPa (184 mm Hg)
· **Density at 20 °C (68 °F):**	0.791 g/cm³ (6.6009 lbs/gal)
· **Relative density**	Not determined.
· **Vapor 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 at 20 °C (68 °F):	32 mPas
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	99.4 %
VOC content:	0.05 % 0.5 g/l / 0.00 lb/gal
Solids content:	0.4 %
· **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.

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 8)

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
67-64-1 acetone		
Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **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:
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
95-50-1	1,2-dichlorobenzene	3
106-46-7	1,4-dichlorobenzene	2B
121-14-2	2,4-dinitrotoluene	2B
118-74-1	hexachlorobenzene	2B
98-95-3	nitrobenzene	2B
91-20-3	naphthalene	2B
129-00-0	pyrene	3
120-12-7	anthracene	3
85-01-8	phenanthrene	3
206-44-0	fluoranthene	3
83-32-9	acenaphthene	3
53-70-3	dibenz[a,h]anthracene	2A
218-01-9	chrysene	2B
205-99-2	benz[e]acephenanthrylene	2B
50-32-8	benzo[a]pyrene	1
56-55-3	benz[a]anthracene	2B
191-24-2	benzo[ghi]perylene	3
117-81-7	di-(2-ethylhexyl) phthalate	2B
85-68-7	BBP	3

· **NTP (National Toxicology Program)**		
106-46-7	1,4-dichlorobenzene	R
118-74-1	hexachlorobenzene	R
98-95-3	nitrobenzene	R
91-20-3	naphthalene	R

(Contd. on page 10)

(Contd. of page 9)

129-00-0	pyrene	R
120-12-7	anthracene	R
85-01-8	phenanthrene	R
206-44-0	fluoranthene	R
53-70-3	dibenz[a,h]anthracene	R
218-01-9	chrysene	R
205-99-2	benz[e]acephenanthrylene	R
50-32-8	benzo[a]pyrene	R
56-55-3	benz[a]anthracene	R
117-81-7	di-(2-ethylhexyl) phthalate	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **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 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely 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

· **UN-Number**
· **DOT, IMDG, IATA** UN1090

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 4 Reviewed on 04/29/2019

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 10)

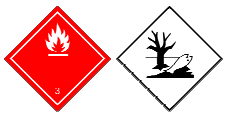
· **UN proper shipping name**	
· **DOT**	Acetone solution
· **IMDG**	ACETONE solution, MARINE POLLUTANT
· **IATA**	ACETONE solution

· **Transport hazard class(es)**

· **DOT**

· **Class**	3 Flammable liquids
· **Label**	3

· **IMDG**



· **Class**	3 Flammable liquids
· **Label**	3

· **IATA**

· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, IMDG, IATA**	II
· **Environmental hazards:**	Product contains environmentally hazardous substances: 1,2-dichlorobenzene, dibenz[a,h]anthracene
· **Marine pollutant:**	Symbol (fish and tree)
· **Special precautions for user**	Warning: Flammable liquids
· **Danger code (Kemler):**	33
· **EMS Number:**	F-E,S-D
· **Stowage Category**	B
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations**	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

(Contd. on page 12)

Safety Data Sheet
acc. to OSHA HCS

(Contd. of page 11)

· **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 1090 ACETONE SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

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15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**	
98-95-3	nitrobenzene
129-00-0	pyrene

· **Section 313 (Specific toxic chemical listings):**	
132-64-9	dibenzofuran
95-50-1	1,2-dichlorobenzene
106-46-7	1,4-dichlorobenzene
131-11-3	dimethyl phthalate
121-14-2	2,4-dinitrotoluene
118-74-1	hexachlorobenzene
98-95-3	nitrobenzene
120-82-1	1,2,4-trichlorobenzene
91-20-3	naphthalene
120-12-7	anthracene
85-01-8	phenanthrene
206-44-0	fluoranthene
53-70-3	dibenz[a,h]anthracene
218-01-9	chrysene
205-99-2	benz[e]acephenanthrylene
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
191-24-2	benzo[ghi]perylene
117-81-7	di-(2-ethylhexyl) phthalate

· **TSCA (Toxic Substances Control Act):**		
67-64-1	acetone	ACTIVE
101-55-3	4-bromophenyl phenyl ether	ACTIVE
132-64-9	dibenzofuran	ACTIVE
95-50-1	1,2-dichlorobenzene	ACTIVE
106-46-7	1,4-dichlorobenzene	ACTIVE

(Contd. on page 13)

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 4 Reviewed on 04/29/2019

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 12)

131-11-3	dimethyl phthalate	ACTIVE
121-14-2	2,4-dinitrotoluene	ACTIVE
117-84-0	dioctyl phthalate	ACTIVE
118-74-1	hexachlorobenzene	ACTIVE
98-95-3	nitrobenzene	ACTIVE
120-82-1	1,2,4-trichlorobenzene	ACTIVE
91-20-3	naphthalene	ACTIVE
129-00-0	pyrene	ACTIVE
120-12-7	anthracene	ACTIVE
85-01-8	phenanthrene	ACTIVE
206-44-0	fluoranthene	ACTIVE
83-32-9	acenaphthene	ACTIVE
53-70-3	dibenz[a,h]anthracene	ACTIVE
218-01-9	chrysene	ACTIVE
50-32-8	benzo[a]pyrene	ACTIVE
56-55-3	benz[a]anthracene	ACTIVE
117-81-7	di-(2-ethylhexyl) phthalate	ACTIVE
85-68-7	BBP	ACTIVE
84-66-2	diethyl phthalate	ACTIVE
78-59-1	3,5,5-trimethylcyclohex-2-enone	ACTIVE

· **Hazardous Air Pollutants**	
132-64-9	dibenzofuran
106-46-7	1,4-dichlorobenzene
131-11-3	dimethyl phthalate
121-14-2	2,4-dinitrotoluene
118-74-1	hexachlorobenzene
98-95-3	nitrobenzene
120-82-1	1,2,4-trichlorobenzene
91-20-3	naphthalene
129-00-0	pyrene
120-12-7	anthracene
85-01-8	phenanthrene
206-44-0	fluoranthene
53-70-3	dibenz[a,h]anthracene
218-01-9	chrysene
205-99-2	benz[e]acephenanthrylene
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
117-81-7	di-(2-ethylhexyl) phthalate
78-59-1	3,5,5-trimethylcyclohex-2-enone

(Contd. on page 14)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 13)

· **Proposition 65**

· **Chemicals known to cause cancer:**	
106-46-7	1,4-dichlorobenzene
121-14-2	2,4-dinitrotoluene
118-74-1	hexachlorobenzene
98-95-3	nitrobenzene
91-20-3	naphthalene
53-70-3	dibenz[a,h]anthracene
218-01-9	chrysene
205-99-2	benz[e]acephenanthrylene
50-32-8	benzo[a]pyrene
56-55-3	benz[a]anthracene
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:**	
121-14-2	2,4-dinitrotoluene
98-95-3	nitrobenzene
117-81-7	di-(2-ethylhexyl) phthalate

· **Chemicals known to cause developmental toxicity:**	
118-74-1	hexachlorobenzene
117-81-7	di-(2-ethylhexyl) phthalate
85-68-7	BBP

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**		
67-64-1	acetone	I
101-55-3	4-bromophenyl phenyl ether	D
132-64-9	dibenzofuran	D
95-50-1	1,2-dichlorobenzene	D
131-11-3	dimethyl phthalate	D
118-74-1	hexachlorobenzene	B2
98-95-3	nitrobenzene	L
120-82-1	1,2,4-trichlorobenzene	D
91-20-3	naphthalene	C, CBD
129-00-0	pyrene	D
120-12-7	anthracene	D
85-01-8	phenanthrene	D
206-44-0	fluoranthene	D
83-32-9	acenaphthene	A (oral)
53-70-3	dibenz[a,h]anthracene	B2
218-01-9	chrysene	B2

(Contd. on page 15)

(Contd. of page 14)

205-99-2	benz[e]acephenanthrylene	B2
50-32-8	benzo[a]pyrene	CaH
56-55-3	benz[a]anthracene	B2
191-24-2	benzo[ghi]perylene	D
117-81-7	di-(2-ethylhexyl) phthalate	B2
85-68-7	BBP	C
84-66-2	diethyl phthalate	D
78-59-1	3,5,5-trimethylcyclohex-2-enone	C

· **TLV (Threshold Limit Value established by ACGIH)**

67-64-1	acetone	A4
95-50-1	1,2-dichlorobenzene	A4
106-46-7	1,4-dichlorobenzene	A3
118-74-1	hexachlorobenzene	A3
98-95-3	nitrobenzene	A3
91-20-3	naphthalene	A4
218-01-9	chrysene	A3
205-99-2	benz[e]acephenanthrylene	A2
50-32-8	benzo[a]pyrene	A2
56-55-3	benz[a]anthracene	A2
117-81-7	di-(2-ethylhexyl) phthalate	A3
84-66-2	diethyl phthalate	A4
78-59-1	3,5,5-trimethylcyclohex-2-enone	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

106-46-7	1,4-dichlorobenzene
218-01-9	chrysene
50-32-8	benzo[a]pyrene
117-81-7	di-(2-ethylhexyl) phthalate

· **National regulations:**
· **Additional classification according to Decree on Hazardous Materials:**
Carcinogenic hazardous material group III (dangerous).

· **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.

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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.

· **Department issuing SDS:** Document Control / Regulatory
· **Contact:** regulatory@ultrasci.com
· **Date of preparation / last revision** 05/28/2019 / 3

(Contd. on page 16)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck Base/Neutrals Sample (1X2 mL)

(Contd. of page 15)

· **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
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Carc. 1B: Carcinogenicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
· *** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 05/28/2019 Version Number 3 Reviewed on 05/28/2019

*
1 Identification

· **Product identifier**

· **Trade name: QualityCheck acids sample (1 x 2 mL)**

· **Part number:** QCM-400
· **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**


GHS02 Flame

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


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
· **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Causes damage to organs.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

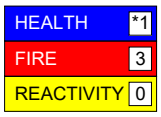
Trade name: QualityCheck acids sample (1 x 2 mL)

(Contd. of page 1)

· **Precautionary statements**
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/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 on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep 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.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *1
Fire = 3
Reactivity = 0

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

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3 Composition/information on ingredients

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

· **Dangerous components:**		
67-56-1	methanol	99.747%

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.

(Contd. on page 3)

(Contd. of page 2)

Remove breathing apparatus 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.
· **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, extinguishing 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.
· **Protective Action Criteria for Chemicals**

· **PAC-1:**		
67-56-1	methanol	530 ppm
95-57-8	2-chlorophenol	2.3 mg/m³
105-67-9	2,4-xylenol	6.9 mg/m³
120-83-2	2,4-dichlorophenol	0.2 ppm
88-75-5	2-nitrophenol	2.1 mg/m³
100-02-7	4-nitrophenol	0.69 mg/m³
87-86-5	pentachlorophenol	1 mg/m³
88-06-2	2,4,6-trichlorophenol	2.5 mg/m³

(Contd. on page 4)

(Contd. of page 3)

59-50-7	chlorocresol	5.5 mg/m³
108-95-2	phenol	15 ppm

· **PAC-2:**		
67-56-1	methanol	2,100 ppm
95-57-8	2-chlorophenol	25 mg/m³
105-67-9	2,4-xylenol	76 mg/m³
120-83-2	2,4-dichlorophenol	2 ppm
88-75-5	2-nitrophenol	23 mg/m³
100-02-7	4-nitrophenol	7.6 mg/m³
87-86-5	pentachlorophenol	15 mg/m³
88-06-2	2,4,6-trichlorophenol	27 mg/m³
59-50-7	chlorocresol	60 mg/m³
108-95-2	phenol	23 ppm

· **PAC-3:**		
67-56-1	methanol	7200* ppm
95-57-8	2-chlorophenol	150 mg/m³
105-67-9	2,4-xylenol	460 mg/m³
120-83-2	2,4-dichlorophenol	20 ppm
88-75-5	2-nitrophenol	140 mg/m³
100-02-7	4-nitrophenol	46 mg/m³
87-86-5	pentachlorophenol	150 mg/m³
88-06-2	2,4,6-trichlorophenol	160 mg/m³
59-50-7	chlorocresol	360 mg/m³
108-95-2	phenol	200 ppm

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 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.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 5)

(Contd. of page 4)

· **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 with limit values that require monitoring at the workplace:**	
67-56-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI

· **Ingredients with biological limit values:**	
67-56-1 methanol	
BEI	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)

· **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.
· **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

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck acids sample (1 x 2 mL)

(Contd. of page 5)

· **Eye protection:**

Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Colorless
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64.7 °C (148.5 °F)
· **Flash point:**	9 °C (48.2 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	455 °C (851 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	5.5 Vol %
Upper:	44 Vol %
· **Vapor pressure at 20 °C (68 °F):**	100 hPa (75 mm Hg)
· **Density at 20 °C (68 °F):**	0.80135 g/cm³ (6.68727 lbs/gal)
· **Relative density**	Not determined.
· **Vapor 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.

(Contd. on page 7)

(Contd. of page 6)

· **Solvent content:**	
Organic solvents:	99.8 %
VOC content:	99.80 % 799.7 g/l / 6.67 lb/gal
Solids content:	0.2 %
· **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 that are relevant for classification:**		
ATE (Acute Toxicity Estimate)		
Inhalative	LC50/4 h	3.01 mg/L

67-56-1 methanol		
Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
95-57-8	2-chlorophenol	2B
120-83-2	2,4-dichlorophenol	2B
87-86-5	pentachlorophenol	2B
88-06-2	2,4,6-trichlorophenol	2B
108-95-2	phenol	3

· **NTP (National Toxicology Program)**		
87-86-5	pentachlorophenol	R

(Contd. on page 8)

(Contd. of page 7)

88-06-2	2,4,6-trichlorophenol	R

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **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 1 (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.
· **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

· **UN-Number**
· **DOT, IMDG, IATA** UN1230

· **UN proper shipping name**
· **DOT** Methanol solution
· **IMDG, IATA** METHANOL solution

· **Transport hazard class(es)**

· **DOT**

· **Class** 3 Flammable liquids

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck acids sample (1 x 2 mL)

(Contd. of page 8)

· **Label**	3, 6.1
· **IMDG**	
	
· **Class**	3 Flammable liquids
· **Label**	3/6.1
· **IATA**	
	
· **Class**	3 Flammable liquids
· **Label**	3 (6.1)
· **Packing group**	
· **DOT, 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**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L
· **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

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15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**	
95-48-7	o-cresol
108-95-2	phenol

(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck acids sample (1 x 2 mL)

(Contd. of page 9)

· **Section 313 (Specific toxic chemical listings):**

67-56-1	methanol
95-57-8	2-chlorophenol
95-48-7	o-cresol
105-67-9	2,4-xylenol
120-83-2	2,4-dichlorophenol
88-75-5	2-nitrophenol
100-02-7	4-nitrophenol
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
108-95-2	phenol

· **TSCA (Toxic Substances Control Act):**

67-56-1	methanol	ACTIVE
95-57-8	2-chlorophenol	ACTIVE
95-48-7	o-cresol	ACTIVE
105-67-9	2,4-xylenol	ACTIVE
120-83-2	2,4-dichlorophenol	ACTIVE
88-75-5	2-nitrophenol	ACTIVE
100-02-7	4-nitrophenol	ACTIVE
87-86-5	pentachlorophenol	ACTIVE
88-06-2	2,4,6-trichlorophenol	ACTIVE
59-50-7	chlorocresol	ACTIVE
108-95-2	phenol	ACTIVE

· **Hazardous Air Pollutants**

67-56-1	methanol
95-48-7	o-cresol
100-02-7	4-nitrophenol
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
108-95-2	phenol

· **Proposition 65**

· **Chemicals known to cause cancer:**

87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

67-56-1	methanol

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Trade name: QualityCheck acids sample (1 x 2 mL)

(Contd. of page 10)

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**		
95-48-7	o-cresol	C
87-86-5	pentachlorophenol	L
88-06-2	2,4,6-trichlorophenol	B2
108-95-2	phenol	D, I

· **TLV (Threshold Limit Value established by ACGIH)**		
87-86-5	pentachlorophenol	A3
108-95-2	phenol	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **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** 05/28/2019 / 2
· **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
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
· *** Data compared to the previous version altered.**