

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

### 1 Identification

- **Product identifier**
- **Trade name:** Aroclor 1254 Standard (1X1 mL)
- **Part number:** PP-354-1
- **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Agilent Technologies, Inc.  
5301 Stevens Creek Blvd.  
Santa Clara, CA 95051 USA
- **Information department:**  
Telephone: 800-227-9770  
e-mail: pdl-msds\_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

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



GHS08 Health hazard

Carc. 1B H350 May cause cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin 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:**

HEXANE

Aroclor 1254 (PCB 1254)

- **Hazard statements**

Highly flammable liquid and vapor.

(Contd. on page 2)

## Safety Data Sheet

### acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

**Trade name: Aroclor 1254 Standard (1X1 mL)**

(Contd. of page 1)

Causes skin irritation.

May cause cancer.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

· **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 swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Do NOT induce vomiting.

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.

Call a poison center/doctor if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

In case of fire: Use for extinction: CO<sub>2</sub>, 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.

(Contd. on page 3)

# Safety Data Sheet acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

**Trade name: Aroclor 1254 Standard (1X1 mL)**

(Contd. of page 2)

**Dangerous components:**

	HEXANE	99.848%
11097-69-1	Aroclor 1254 (PCB 1254)	0.152%

## 4 First-aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **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:**  
CO<sub>2</sub>, 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:**

11097-69-1	Aroclor 1254 (PCB 1254)	1.5 mg/m <sup>3</sup>
------------	-------------------------	-----------------------

**PAC-2:**

11097-69-1	Aroclor 1254 (PCB 1254)	68 mg/m <sup>3</sup>
------------	-------------------------	----------------------

(Contd. on page 4)

# Safety Data Sheet acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

**Trade name: Aroclor 1254 Standard (1X1 mL)**

(Contd. of page 3)

**PAC-3:**

11097-69-1 Aroclor 1254 (PCB 1254)

200 mg/m<sup>3</sup>

## 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:**

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

At this time, the other constituents have no known exposure limits.

**HEXANE**

REL Long-term value: 350 mg/m<sup>3</sup>, 100 ppm  
Ceiling limit value: 1800\* mg/m<sup>3</sup>, 510\* ppm  
\*15-min

TLV Short-term value: 3500 mg/m<sup>3</sup>, 1000 ppm  
Long-term value: 1760 mg/m<sup>3</sup>, 500 ppm

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

PEL Long-term value: 0.5 mg/m<sup>3</sup>  
Skin

REL Long-term value: 0.001 mg/m<sup>3</sup>  
See Pocket Guide App. A

(Contd. on page 5)

# Safety Data Sheet acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

**Trade name: Aroclor 1254 Standard (1X1 mL)**

(Contd. of page 4)

TLV	Long-term value: 0.5 mg/m <sup>3</sup> Skin
-----	--

· **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 skin.

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

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Color: According to product specification

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

(Contd. on page 6)

## Safety Data Sheet

### acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

**Trade name: Aroclor 1254 Standard (1X1 mL)**

(Contd. of page 5)

<b>Boiling point/Boiling range:</b>	Undetermined.
· <b>Flash point:</b>	<-20 °C (<-4 °F)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure at 20 °C (68 °F):</b>	115 hPa (86.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	0.7 g/cm <sup>3</sup> (5.8415 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>VOC content:</b>	0.00 % 0.0 g/l / 0.00 lb/gal
<b>Solids content:</b>	0.0 %
· <b>Other information</b>	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.

(Contd. on page 7)

# Safety Data Sheet acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

Trade name: Aroclor 1254 Standard (1X1 mL)

(Contd. of page 6)

## 11 Toxicological information

### · Information on toxicological effects

#### · Acute toxicity:

#### · LD/LC50 values that are relevant for classification:

11097-69-1 Aroclor 1254 (PCB 1254)

Oral LD50 1,010 mg/kg (rat)

#### · Primary irritant effect:

· **on the skin:** Irritant to skin and mucous membranes.

· **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:  
Irritant

#### · Carcinogenic categories

#### · IARC (International Agency for Research on Cancer)

11097-69-1 Aroclor 1254 (PCB 1254)

2A

#### · NTP (National Toxicology Program)

11097-69-1 Aroclor 1254 (PCB 1254)

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.

(Contd. on page 8)

## Safety Data Sheet

### acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2


Reviewed on 04/01/2019

**Trade name: Aroclor 1254 Standard (1X1 mL)**

(Contd. of page 7)

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

### 14 Transport information

· <b>Not Regulated, De minimus Quantities</b>	-
· <b>UN-Number</b>	
· <b>DOT, IMDG, IATA</b>	UN1208
· <b>UN proper shipping name</b>	
· <b>DOT</b>	Hexanes solution
· <b>IMDG, IATA</b>	HEXANES solution
· <b>Transport hazard class(es)</b>	
· <b>DOT, IMDG, IATA</b>	
	
· <b>Class</b>	3 Flammable liquids
· <b>Label</b>	3
· <b>Packing group</b>	
· <b>DOT, IMDG, IATA</b>	II
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Warning: Flammable liquids
· <b>Danger code (Kemler):</b>	33
· <b>EMS Number:</b>	F-E,S-D
· <b>Stowage Category</b>	B
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1208 HEXANES SOLUTION, 3, II

(Contd. on page 9)



# Safety Data Sheet acc. to OSHA HCS

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

Trade name: Aroclor 1254 Standard (1X1 mL)

(Contd. of page 8)

## 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.

### Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

### TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

### TSCA new (21st Century Act): (Substances not listed)

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

### Proposition 65

#### Chemicals known to cause cancer:

None of the ingredients is listed.

#### 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:

None of the ingredients is listed.

### Carcinogenic categories

#### EPA (Environmental Protection Agency)

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

### National regulations:

#### Information about limitation of use:

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

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

## 16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation.  
No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

#### Date of preparation / last revision 04/01/2019 / 1

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 10)

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 04/01/2019

Version Number 2

Reviewed on 04/01/2019

**Trade name: Aroclor 1254 Standard (1X1 mL)**

(Contd. of page 9)

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  
Flam. Liq. 2: Flammable liquids – Category 2  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Carc. 1B: Carcinogenicity – Category 1B  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Asp. Tox. 1: Aspiration hazard – Category 1

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