

Aroclor 1254 Standard

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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Version: 1.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Aroclor 1254 Standard
Product code : AL0-101280; AL0-131070
Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Laboratory Use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Certified reference material for laboratory use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Phenova
6390 Joyce Dr. Suite 100
80403 Golden, CO - United States
T 1-866-942-2978 - F 1-866-283-0269
info@phenova.com - www.phenova.com

1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924
ChemTel Assistance (International) +1 813-248-0585

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Repr. 2 H361
STOT SE 3 H336
STOT RE 2 H373
Asp. Tox. 1 H304
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02



GHS07



GHS08



GHS09

Signal word (CLP) :

Danger

Hazardous ingredients :

Aroclor 1254; hexane

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapor.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.

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	H336 - May cause drowsiness or dizziness. H361 - Suspected of damaging fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure. H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P308+P313 - IF exposed or concerned: Get medical advice/attention. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up.

No labeling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hexane	(CAS-No.) 110-54-3 (EC-No.) 203-777-6 (EC Index-No.) 601-037-00-0	99.99	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361f STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Aroclor 1254	(CAS-No.) 11097-69-1 (EC Index-No.) 602-039-00-4	0.01	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	Specific concentration limits
hexane	(CAS-No.) 110-54-3 (EC-No.) 203-777-6 (EC Index-No.) 601-037-00-0	(5 ≤C < 100) STOT RE 2, H373
Aroclor 1254	(CAS-No.) 11097-69-1 (EC Index-No.) 602-039-00-4	(0.005 ≤C < 100) STOT RE 2, H373

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get immediate medical advice/attention. Get medical advice/attention.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapors/spray.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area.
Hygiene measures : Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.
Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Aroclor 1254 Standard		
Italy - Portugal - USA ACGIH	Local name	n-Hexane
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair; peripheral neuropathy; eye irr; Skin; BEI
USA OSHA	Local name	n-Hexane
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
Aroclor 1254 (11097-69-1)		
Belgium	Limit value (mg/m ³)	0.5 mg/m ³ (Biphényles chlorés (54 % Cl); Belgium; Time-weighted average exposure limit 8 h)
France	VME (mg/m ³)	0.5 mg/m ³ (Biphényle chloré (54 % Cl); France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
Italy - Portugal - USA ACGIH	Local name	Chlorodiphenyl (54% chlorine)

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Aroclor 1254 (11097-69-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³ (Chlorodiphenyl (54% chlorine); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	URT irr; liver dam; chloracne
USA OSHA	Local name	Chlorodiphenyl (54% Chlorine)(PCB)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.5 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	0.1 mg/m ³ Polychlorinated biphenyls (PCB); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)

hexane (110-54-3)		
EU	IOELV TWA (mg/m ³)	72 mg/m ³
EU	IOELV TWA (ppm)	20 ppm
Belgium	Limit value (mg/m ³)	72 mg/m ³
Belgium	Limit value (ppm)	20 ppm
France	VME (mg/m ³)	72 mg/m ³
France	VME (ppm)	20 ppm
Italy - Portugal - USA ACGIH	Local name	n-Hexane
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair; peripheral neuropathy; eye irr; Skin; BEI
USA OSHA	Local name	n-Hexane
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1800 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm
Netherlands	Grenswaarde TGG 8H (mg/m ³)	72 mg/m ³
Netherlands	Grenswaarde TGG 8H (ppm)	20 ppm
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	144 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (ppm)	40 ppm
United Kingdom	WEL TWA (mg/m ³)	72 mg/m ³
United Kingdom	WEL TWA (ppm)	20 ppm

8.2. Exposure controls

Appropriate engineering controls

: Either local exhaust or general room ventilation is usually required.

Personal protective equipment

: Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



Hand protection

: Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.

Eye protection

: Chemical goggles or safety glasses. Safety glasses.

Skin and body protection

: Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear respiratory protection.

Other information

: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless.
Odor	: characteristic.
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available

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Flammability (solid, gas)	: Highly flammable liquid and vapor
Relative density	: No data available
Solubility	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established. Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Aroclor 1254 (11097-69-1)	
LD50 oral rat	1010 mg/kg (Rat)
ATE CLP (oral)	1010 mg/kg body weight
hexane (110-54-3)	
LD50 oral rat	16000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 3350 mg/kg body weight (Equivalent or similar to OECD 402, 4 h, Rabbit, Male, Read-across, Dermal)
LC50 inhalation rat (ppm)	> 5000 ppm (Equivalent or similar to OECD 403, 24 h, Rat, Male, Experimental value, Inhalation (vapours))
ATE CLP (oral)	16000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met
Respiratory or skin sensitization	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met May cause cancer
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

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Aroclor 1254 (11097-69-1)	
LC50 fish 1	0.0077 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	1.8 – 24 mg/l (EC50; 336 h)

12.2. Persistence and degradability

Aroclor 1254 Standard	
Persistence and degradability	May cause long-term adverse effects in the environment.

Aroclor 1254 (11097-69-1)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Adsorbs into the soil.

hexane (110-54-3)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
ThOD	3.52 g O ₂ /g substance

12.3. Bioaccumulative potential

Aroclor 1254 Standard	
Bioaccumulative potential	Not established.

Aroclor 1254 (11097-69-1)	
BCF fish 1	238000 (BCF)
BCF fish 2	46000 (BCF)
BCF other aquatic organisms 1	3800 (BCF; 96 h)
BCF other aquatic organisms 2	160 – 6300 (BCF)
Partition coefficient n-octanol/water (Log Pow)	6.03
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).

hexane (110-54-3)	
BCF fish 1	501.187 (Other, Pimephales promelas, QSAR)
Partition coefficient n-octanol/water (Log Pow)	4 (Experimental value, Equivalent or similar to OECD 107, 20 °C)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

12.4. Mobility in soil

hexane (110-54-3)	
Surface tension	0.018 N/m (25 °C, 1 g/l)
Partition coefficient n-octanol/water (Log Koc)	3.34 (log Koc, QSAR)
Ecology - soil	Low potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

Component	
hexane (110-54-3)	This substance/mixture does not meet the PBT criteria of REACH, annex XIII This substance/mixture does not meet the vPvB criteria of REACH, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1993
UN-No. (IATA) : 1993
UN-No. (IMDG) : 1993

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (IATA) : Flammable liquid, n.o.s.
Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (ADN) : FLAMMABLE LIQUID, N.O.S.
Transport document description (ADR) : UN 1993 FLAMMABLE LIQUID, N.O.S. (hexane(110-54-3)), 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS

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14.3. Packing group

Class (ADR) : 3
Classification code (ADR) : F1
Class (IATA) : 3
Class (IMDG) : 3
Class (ADN) : 3
Hazard labels (ADR) : 3



Hazard labels (IATA) : 3



Hazard labels (IMDG) : 3



14.4. Packing group

Packing group (ADR) : II
Packing group (IATA) : II
Packing group (IMDG) : II

14.5. Environmental hazards

Dangerous for the environment :

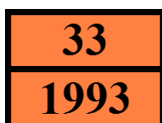


Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Orange plates :



Special provision (ADR) : 274, 601, 640D
Transport category (ADR) : 2
Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 1I
Excepted quantities (ADR) : E2
EAC : •3YE

14.6.2. Transport by sea

Special provision (IMDG) : 274
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP1, TP28, TP8
EmS-No. (Fire) : F-E

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EmS-No. (Spillage) : S-E
Stowage category (IMDG) : B

14.6.3. Air transport

CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
PCA packing instructions (IATA) : 353
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA max net quantity (IATA) : 5L
PCA Excepted quantities (IATA) : E2
Special provision (IATA) : A3
ERG code (IATA) : 3H

14.6.4. Inland waterway transport

Carriage prohibited (ADN) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no REACH candidate substance
Contains no REACH Annex XIV substances.

15.1.2. National regulations

Germany

Water hazard class (WGK) : 2 - significant hazardous to water

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

PHV SDS EU

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