Printing date 06/09/2023 Reviewed on 06/09/2023

1 Identification

- · Product identifier
- · Product Name: Aroclor 1242 (High Level)
- · Part Name: PCB-1242H
- · Application of the substance / the mixture Certified Reference Material
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Spex CertiPrep, LLC.

203 Norcross Ave, Metuchen,

NJ 08840 USA 732-549-7144

USMet-CRMSales@antylia.com

- · Information department: product safety department
- · Emergency telephone number:

Emergency Phone Number (24 hours) CHEMTREC (800-424-9300) Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 1B H350 May cause cancer.

Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irritation 2 H315 Causes skin irritation.

Specific Target Organ Toxicity - Single Exposure 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:

n-hexane

Aroclor 1242

· Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

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

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

(Contd. of page 1)



Safety Data Sheet acc. to OSHA HCS

Printing date 06/09/2023 Reviewed on 06/09/2023

Product Name: Aroclor 1242 (High Level)

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 If swallowed: Immediately call a poison center/doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a poison center/doctor if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

3 h

Health = 1 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *1 Fire = 3Reactivity = 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:		
110-54-3	n-hexane	99.9%
53469-21-9	Aroclor 1242	0.1%

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: 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.
- · After swallowing: Do not give anything to eat or drink Do not induce vomitting
- · 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.

(Contd. on page 3)



Printing date 06/09/2023 Reviewed on 06/09/2023

Product Name: Aroclor 1242 (High Level)

(Contd. of page 2)

· 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

260 ppm
3 mg/m³
00* ppm
0 mg/m³
0** ppm
mg/m³
0

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.
- $\cdot \textit{Specific end use}(s) \textit{ No further relevant information available}.$

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:			
110	110-54-3 n-hexane		
PEL	Long-term value: 1800 mg/m³, 500 ppm		
REL	Long-term value: 180 mg/m³, 50 ppm		
TLV	Long-term value: 50 ppm Skin; BEI		
53469-21-9 Aroclor 1242			
PEL	Long-term value: 1 mg/m³ Skin		
REL	Long-term value: 0.001 mg/m³ See Pocket Guide App. A		
TLV	Long-term value: 1 mg/m³ Skin		
Lucardiante with historical limit values.			

· Ingredients with biological limit values:

110-54-3 n-hexane

BEI 0.5 mg/L

Medium: urine

Time: end of shift

Parameter: 2.5-Hexanedione without hydrolysis

· Additional information: The lists that were valid during the creation were used as basis.

Printing date 06/09/2023 Reviewed on 06/09/2023

Product Name: Aroclor 1242 (High Level)

(Contd. of page 3)

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Partition coefficient (n-octanol/water): Not applicable.

9 Ph	vsical	and	c	hemical	pro	nerties
<i></i>	ysicui	unu	6	<i>iciiiicai</i>	$\rho i \sigma$	permes

, , , , , ,	
· Information on basic physical and c · General Information	hemical properties
· Appearance:	
Form:	Liquid
Color:	According to product specification
· Odor:	Characteristic
· Odour Threshold:	Not applicable.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	69 °C (156.2 °F)
· Flash point:	< 0 °C (< 32 °F)
· Flammability (solid, gaseous):	Highly flammable.
· Ignition temperature:	240 °C (464 °F)
· Decomposition temperature:	Not applicable.
· 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:	1.2 Vol %
Upper:	7.4 Vol %
· Vapor pressure at 20 °C (68 °F):	160 hPa (120 mm Hg)
· Density at 20 °C (68 °F)	0.87982 g/cm³ (7.3421 lbs/gal)
Relative density	Not applicable.
· Vapor density	Not applicable.
Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.

(Contd. on page 5)



Printing date 06/09/2023 Reviewed on 06/09/2023

Product Name: Aroclor 1242 (High Level)

Viscosity:
Dynamic:
Kinematic:
Not applicable.
Solvent content:
Organic solvents:
YOC content:
99.90%
Solids content:
0.0%

No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

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

Product is suspected to cause damage to fertility.

Product is suspected to cause birth defects.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
53469-21-9 Aroclor 1242	2A	
· 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:
- $\cdot \textbf{\it Bioaccumulative potential \it No \it further relevant information available.}$
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Printing date 06/09/2023 Reviewed on 06/09/2023

Product Name: Aroclor 1242 (High Level)

(Contd. of page 5)

 $\cdot \textit{UN "Model Regulation":}$

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

14 Transport information	
· UN-Number	HMIMO
· DOT, ADR, IMDG, IATA · UN proper shipping name	UN1208
· DOT · ADR · IMDG, IATA	Hexanes 1208 HEXANES, ENVIRONMENTALLY HAZARDOUS HEXANES
· Transport hazard class(es)	
· DOT	
A MONAGE LISTO	
· Class · Label	3 Flammable liquids 3
· ADR	
· Class · Label	3 Flammable liquids 3
· IMDG, IATA	J
· Class	3 Flammable liquids
Label	3
· Packing group · DOT, ADR, IMDG, IATA	II
Environmental hazards:	
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user · Hazard identification number (Kemler code):	Warning: Flammable liquids 33
· EMS Number:	F-E,S-D
· Stowage Category	E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC	C Code Not applicable.
· Transport/Additional information:	
· ADR · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
·IMDG	
· Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2
· Excepted quantities (E.V.)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

UN 1208 HEXANES, 3, II, ENVIRONMENTALLY HAZARDOUS

Printing date 06/09/2023 Reviewed on 06/09/2023

Product Name: Aroclor 1242 (High Level)

(Contd. of page 6)

15 Regulatory information

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

· Section 313 (Specific t	oxic chemical i	listings):
---------------------------	-----------------	------------

110-54-3 n-hexane

· TSCA (Toxic Substances Control Act):

110-54-3 n-hexane

ACTIVE

· Hazardous Air Pollutants

110-54-3 n-hexane

· 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:

110-54-3 n-hexane

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)			
110-54-3	n-hexane	II	
53469-21-9	Aroclor 1242	B2	

· TLV (Threshold Limit Value)

None of the ingredients is listed.

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

53469-21-9 Aroclor 1242

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







GHS02

GHS07

· Signal word Danger

· Hazard-determining components of labeling:

n-hexane

Aroclor 1242

· Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

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

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 If swallowed: Immediately call a poison center/doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a poison center/doctor if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.



Printing date 06/09/2023 Reviewed on 06/09/2023

Product Name: Aroclor 1242 (High Level)

(Contd. of page 7)

P501

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

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: product safety department
- · Contact:

Spex CertiPrep, LLC.

1-732-549-7144

- · Date of preparation / last revision 06/09/2023
- Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

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)

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

Flammable Liquids 2: Flammable liquids – Category 2 Skin Irritation 2: Skin corrosion/irritation – Category 2

Carcinogenicity 1B: Carcinogenicity - Category 1B

Toxic to Reproduction 2: Reproductive toxicity – Category 2
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2 Aspiration Hazard 1: Aspiration hazard - Category 1