

# Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 08/04/2014 Revision date: 13/04/2015 : Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Product name : Aroclor 1016 Standard

Product code : AL0-101275
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

#### 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

# Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Repr.Cat.3; R62

F; R11 Xn; R65 Xn; R48/20 Xi; R38

N; R51/53 R67

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

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#### 2.2. Label elements

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

Hazard pictograms (CLP)









Signal word (CLP) : Danger Hazardous ingredients : hexane

Hazard statements (CLP) : H225 - Highly flammable liquid and vapor

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

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. Substance

Not applicable

## 3.2. Mixture

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 Acute 1, H400 Aquatic Chronic 1, H410
Aroclor 1016	(CAS No) 12674-11-2	0.01	Aquatic Acute 1, H400 (M=1000) 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	(C >= 5) 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

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 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

persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

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

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries 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.

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

No additional information available

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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. рΗ : 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

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 1016 (12674-11-2)	
LD50 oral rat	2300 ml/kg

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hexane (110-54-3)	
LD50 oral rat	25000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	3000 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (ppm)	48000 ppm/4h (Rat; Literature study)
ATE CLP (oral)	25000.000 mg/kg body weight
ATE CLP (dermal)	3000.000 mg/kg body weight
ATE CLP (gases)	48000.000 ppmV/4h

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.

Specific target organ toxicity (single exposure) May cause drowsiness or dizziness.

Specific target organ toxicity (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

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

Aroclor 1016 (12674-11-2)		
LC50 fish 1	0.001 mg/l 96.0 h -Oncorhynchus mkiss (rainbow trout)	
hexane (110-54-3)		
LC50 fish 1	2.5 mg/l (96 h; Pimephales promelas)	
EC50 Daphnia 1	2.1 mg/l (48 h; Daphnia magna)	
LC50 fish 2	4 mg/l (24 h; Carassius auratus)	
EC50 Daphnia 2	0.4 mg/l (96 h; Chaetogammarus marinus)	
Threshold limit other aquatic organisms 1	9.049 mg/l (Protozoa)	
Threshold limit algae 1	10 mg/l (Laminariales; Photosynthesis)	
Threshold limit algae 2	26 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)	

## 12.2. Persistence and degradability

Aroclor 1016 Standard		
Persistence and degradability	May cause long-term adverse effects in the environment.	
hexane (110-54-3)		
Persistence and degradability	Readily biodegradable in water. Photooxidation in water. easily degradable in the soil.	
ThOD	3.52 g O /g substance	
BOD (% of ThOD)	0.63 % ThOD	

## 12.3. Bioaccumulative potential

Aroclor 1016 Standard		
Bioaccumulative potential	Not established.	
hexane (110-54-3)		
BCF fish 1	501.187 (Pimephales promelas)	
Log Pow	3.5 - 3.94 (Calculated)	
Bioaccumulative potential	Bioaccumable.	

## 12.4. Mobility in soil

hexane (110-54-3)	
Surface tension	0.018 N/m

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# 12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

## SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

Waste 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

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** 

#### 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



# 14.4. Packing group

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

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Orange plates

33 1993

Special provision (ADR) : 274, 601, 640D

Transport category (ADR) : 2
Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2

#### 14.6.2. Transport by sea

No additional information available

#### 14.6.3. Air transport

CAO packing instructions (IATA) : 364 CAO max net quantity (IATA) : 60L : 353 PCA packing instructions (IATA) : Y341 PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) : 1L PCA max net quantity (IATA) : 5L : E2 PCA Excepted quantities (IATA) 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 substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

## 15.1.2. National regulations

No additional information available

#### 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.

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