

Safety Data Sheet

Date of issue: 10/06/2016 Revision date: Version: 1.0

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

Product form : Mixture

Product name Cabofuran Standard Product code AL0-101612 Product group Trade product

#### 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

### 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]

H225 Flam. Liq. 2 Acute Tox. 3 (Oral) H301 Acute Tox. 3 (Dermal) H311 STOT SE 1 H370

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

F; R11

T; R23/24/25

T; R39/23/24/25

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

# Label elements

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

Hazard pictograms (CLP)







GHS02

GHS06

Signal word (CLP) : Danger

Hazardous ingredients carbofuran; methanol

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

H301+H311 - Toxic if swallowed or in contact with skin

H370 - Causes damage to organs

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

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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

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

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower

P308+P313 - IF exposed or concerned: Get medical advice/attention

P361+P364 - Take off immediately all contaminated clothing and wash it before reuse

P403+P235 - Store in a well-ventilated place. Keep cool

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]
methanol (Component)	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	99.9	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
carbofuran (Component)	(CAS No) 1563-66-2 (EC no) 216-353-0 (EC index no) 006-026-00-9	0.1	Acute Tox. 1 (Oral), H300 Acute Tox. 2 (Inhalation), H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Name	Product identifier	Specific of	concentration limits
methanol (Component)	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X		0) STOT SE 2, H371 TOT SE 1, H370

## 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. Call a POISON CENTER or

doctor/physician. 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.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.

Immediately call a poison center or doctor/physician. Wash with plenty of soap and water.

Wash contaminated clothing before reuse.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with

water for several minutes. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Immediately call a

poison center or doctor/physician.

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

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Toxic in contact with skin.

Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health

hazard.

# 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 : Use extinguishing media appropriate for surrounding fire.

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.

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Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

# **SECTION 6: Accidental release measures**

Personal precautions, protective equipment and emergency procedure

#### 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.

: Ventilate area. **Emergency procedures** 

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### Methods and material for containment and cleaning up

Methods for cleaning up : Take up in absorbent material. Collect spillage.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Wash hands and other exposed areas with mild soap and water before eating, drinking or Precautions for safe handling

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.

Do not eat, drink or smoke when using this product. Gently wash with plenty of soap and water. Hygiene measures

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 materials : 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

# 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.







Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical Hand protection

penetration.

Eve protection Chemical goggles or safety glasses. Safety glasses.

Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin Skin and body protection

contact.

Respiratory protection Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended

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.

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pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash 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

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

No additional information available

### 10.6. Hazardous decomposition products

May release flammable gases.

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# SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin.

ATE CLP (oral)	98.135 mg/kg body weight
ATE CLP (dermal)	300.300 mg/kg body weight
carbofuran (1563-66-2)	
LD50 oral rat	5 mg/kg (Rat)
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (gases)	100.000 ppmV/4h
ATE CLP (vapors)	0.500 mg/l/4h
ATE CLP (dust, mist)	0.050 mg/l/4h

methanol (67-56-1)	
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (gases)	700.000 ppmV/4h
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	0.500 mg/l/4h

Skin corrosion/irritation : Not classified

Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified

Based on available data, the classification criteria are not met

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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 : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Causes damage to organs.

Specific target organ toxicity (repeated : Not classified

exposure)

Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Based on available data, the classification criteria are not met

Potential Adverse human health effects and

symptoms

: Toxic if swallowed. Toxic in contact with skin.

# SECTION 12: Ecological information

#### 40.4 T---i-it--

carbofuran (1563-66-2)		
LC50 fish 2	0.28 mg/l (LC50; 96 h; Salmo gairdneri)	
methanol (67-56-1)		
LC50 fish 1	15400 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)	
EC50 Daphnia 1	> 10000 mg/l (EC50; DIN 38412-11; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)	
LC50 fish 2	10800 mg/l (LC50; 96 h; Salmo gairdneri)	

# 12.2. Persistence and degradability

Cabofuran Standard		
Persistence and degradability	Not established.	
carbofuran (1563-66-2)		
Persistence and degradability	Not readily biodegradable in water.	
methanol (67-56-1)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.	
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O /g substance	
Chemical oxygen demand (COD)	1.42 g O /g substance	
ThOD	1.5 g O /g substance	
BOD (% of ThOD)	0.8 (Literature study)	

### 12.3. Bioaccumulative potential

Bioaccumulative potential	Not established.
carbofuran (1563-66-2)	
Log Pow	1.52 - 2.32
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

methanol (67-56-1)	
BCF fish 1	< 10 (BCF; 72 h; Leuciscus idus)
Log Pow	-0.77 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

# 12.4. Mobility in soil

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methanol (67-56-1)	
Surface tension	0.023 N/m (20 °C)
Log Koc	Koc,PCKOCWIN v1.66; 1; Calculated value

# 12.5. Results of PBT and vPvB assessment

No additional information available

# 12.6. Other adverse effects

Additional information : Avoid release to the environment

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# 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) : 1992 UN-No.(IATA) : 1992

14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IATA) : FLAMMABLE LIQUID, TOXIC, N.O.S.

Transport document description (ADR) : UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (FLAMMABLE LIQUID, TOXIC, N.O.S.), 3

(6.1), II, (D/E)

14.3. Packing group

 Class (ADR)
 : 3

 Classification code (ADR)
 : FT1

 Class (IATA)
 : 3

 Subsidiary risks (ADR)
 : 6.1

 Hazard labels (ADR)
 : 3, 6.1



Hazard labels (IATA) : 3, 6.1



14.4. Packing group

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

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 336
Classification code (ADR) : FT1

Orange plates : 226

336 1992

Special provision (ADR): 274Transport category (ADR): 2Tunnel restriction code (ADR): D/ELimited quantities (ADR): 11Excepted 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
PCA packing instructions (IATA) : 352

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PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA max net quantity (IATA) : 1L
PCA Excepted quantities (IATA) : E2
ERG code (IATA) : 3HP

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.

PHV SDS EU

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