



# CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE

## Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 18/05/2015

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Version: 1.0

**CLM-1911-S**

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

#### 1.1. Product identifier

Product form : Mixtures  
Product name. : CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE  
Product code : CLM-1911-S

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

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : 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

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

#### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

### 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  
Eye Irrit. 2 H319  
Carc. 2 H351  
STOT SE 3 H335

Full text of H-phrases: see section 16

##### Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.3; R40  
F; R11  
Xn; R20/21  
Xi; R36/37  
R19

Full text of R-phrases: see section 16

##### Classification (GHS-US)

Flam. Liq. 2 H225  
Eye Irrit. 2A H319  
Carc. 2 H351  
STOT SE 3 H335

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

Liver, Kidney, Central nervous system.

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### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS08

GHS07

Signal word (CLP) :

Danger

Hazardous ingredients :

1,4-DIOXANE (P-DIOXANE) UNLABELED

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapor  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors  
P264 - Wash Both hands thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear eye protection, face protection, protective clothing, protective gloves

EUH phrases :

EUH019 - May form explosive peroxides

#### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02

GHS08

GHS07

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors  
P264 - Wash Both hands thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear eye protection, protective gloves, face protection, protective clothing  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P312 - Call a POISON CENTER/doctor/physician if you feel unwell  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P370+P378 - In case of fire: Use Alcohol resistant foam., Dry chemical., Carbon dioxide., Water spray for extinction  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container to Comply with applicable regulations.

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### 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 Directive 67/548/EEC
1,4-DIOXANE (P-DIOXANE) UNLABELED	(CAS No) 123-91-1 (EC no) 241-628-7 (EC index no) 603-024-00-5	99.9903	Carc.Cat.3; R40 F; R11 T; R25 Xn; R20/21 Xi; R36/37 R19
CARBOFURAN (RING-13C6, 99%)	(CAS No) 1563-66-2 (unlabeled) (EC no) 216-353-0 (EC index no) 006-026-00-9	0.0097	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,4-DIOXANE (P-DIOXANE) UNLABELED	(CAS No) 123-91-1 (EC no) 241-628-7 (EC index no) 603-024-00-5	99.9903	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Chronic 4, H413
CARBOFURAN (RING-13C6, 99%)	(CAS No) 1563-66-2 (unlabeled) (EC no) 216-353-0 (EC index no) 006-026-00-9	0.0097	Acute Tox. 1 (Oral), H300 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 Aquatic Acute 1, H400 (M=100)

Name	Product identifier	%	Classification (GHS-US)
1,4-DIOXANE (P-DIOXANE) UNLABELED	(CAS No) 123-91-1	99.9903	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Chronic 4, H413

Full text of R-, H- and EUH-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance.
First-aid measures after inhalation	: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
First-aid measures after ingestion	: Rinse mouth. 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 inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through the skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
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 water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

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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.  
Reactivity : Vapors may form explosive mixture with air.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray to cool unopened containers.  
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

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Avoid release to the environment.

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

- For containment : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

### 6.4. Reference to other sections

No additional information available

## 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 : No naked lights. 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 : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 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. Use explosion-proof electrical equipment.  
Storage conditions : Store at room temperature away from light and moisture.  
Incompatible materials : Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.000000000 ppm Liver damage. Confirmed animal carcinogen with unknown relevance to humans.
USA OSHA	OSHA PEL (TWA) (ppm)	25.000000000 ppm Skin notation. Skin designation.
CARBOFURAN (RING-13C6, 99%) (1563-66-2 (unlabeled))		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.100000000 mg/m <sup>3</sup> Cholinesterase inhibition. Substance for which there is a Biological Exposure Ind

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### 8.2. Exposure controls

Personal protective equipment : Gloves. Protective goggles. Protective clothing. Self-contained breathing apparatus.



Hand protection : Wear suitable protective clothing and gloves.  
Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.  
Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.  
Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

*The properties listed below are for the solvent, the main component of this mixture.*

Physical state : Liquid  
Appearance : Liquid.  
Molecular mass : 88.11  
Color : Colourless.  
Odor : No data available.  
Odor threshold : No data available  
pH : 6.0 - 8 at 500 g/l at 20 °C (68 °F)  
Relative evaporation rate (butyl acetate=1) : No data available  
Melting point : 10 - 12 °C (50 -54 °F) - lit.  
Freezing point : No data available  
Boiling point : 100 - 102 °C (212 - 216 °F) - lit.  
Flash point : 12 °C (54 °F) - closed cup  
Self ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : Highly flammable liquid and vapor  
Vapor pressure : 36 hPa (27 mmHg) at 20 °C (68 °F), 53 hPa (40 mmHg) at 25.20 °C (77.36 °F)  
Relative vapor density at 20 °C : 3.04 - (Air = 1.0)  
Relative density : No data available  
Solubility : Water: completely miscible  
Log Pow : -.27  
Log Kow : No data available  
Viscosity, kinematic : No data available  
Viscosity, dynamic : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available  
Explosive limits : 2 - 22 % (V)

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Vapors may form explosive mixture with air.

### 10.2. Chemical stability

See storage and expiration date on CoA.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Open flame. Direct sunlight.

### 10.5. Incompatible materials

Acids, OxidiOxygen, Oxidizing agents, Halogens, Reducing agents, Perchlorates, Trimethylaluminum.

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### 10.6. Hazardous decomposition products

May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE	
LD50 oral rat	4200 mg/kg
LD50 dermal rabbit	7858 mg/kg
LC50 inhalation rat (mg/l)	46000 mg/m <sup>3</sup> 2 h - Sense Organs and Special Senses (Nose, Eye, Ear and Taste)
ATE (oral)	4200.000 mg/kg body weight
ATE (dermal)	7858.000 mg/kg body weight
ATE (vapors)	46.000 mg/l/4h
ATE (dust, mist)	46.000 mg/l/4h

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)	
LD50 oral rat	4200 mg/kg
LD50 dermal rabbit	7858 mg/kg
LC50 inhalation rat (mg/l)	46000 mg/m <sup>3</sup> 2 h - Sense Organs and Special Senses (Nose, Eye, Ear and Taste)
ATE (oral)	100.000 mg/kg body weight
ATE (dermal)	7858.000 mg/kg body weight
ATE (dust, mist)	1.500 mg/l/4h

CARBOFURAN (RING-13C6, 99%) (1563-66-2 (unlabeled))	
LD50 oral rat	5 mg/kg
LD50 dermal rabbit	885 mg/kg
LC50 inhalation rat (mg/l)	85 mg/m <sup>3</sup>
ATE (oral)	5.000 mg/kg body weight
ATE (dermal)	885.000 mg/kg body weight
ATE (vapors)	0.085 mg/l/4h
ATE (dust, mist)	0.085 mg/l/4h

Skin corrosion/irritation	: Not classified Skin - Human - Chronic exposure causes drying effect on skin and eczema. pH: 6.0 - 8 at 500 g/l at 20 °C (68 °F)
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - rabbit - Eye irritation - 24 h pH: 6.0 - 8 at 500 g/l at 20 °C (68 °F)
Respiratory or skin sensitization	: Not available No data available
Germ cell mutagenicity	: Laboratory experiments have shown mutagenic effects.
Carcinogenicity	: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification. Limited evidence of carcinogenicity in animal studies.
Reproductive toxicity	: Not available
Specific target organ toxicity (single exposure)	: May cause respiratory irritation. May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified No data available
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Toxic if swallowed.
IARC group	: 2B
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through the skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : May cause long lasting harmful effects to aquatic life.

CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE	
LC50 fish 1	985 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	8450 mg/l Daphnia magna (Water flea) - 24 h
ErC50 (algae)	Desmodesmus subspicatus (green algae) - 72 h

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)	
LC50 fish 1	985 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	8450 mg/l Daphnia magna (Water flea) - 24 h
ErC50 (algae)	Desmodesmus subspicatus (green algae) - 72 h

CARBOFURAN (RING-13C6, 99%) (1563-66-2 (unlabeled))	
LC50 fish 1	0.38 mg/l Oncorhynchus mykiss(rainbow trout) - 96 h
EC50 Daphnia 1	0.0018 mg/l Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.001 mg/l Daphnia - 7 d

#### 12.2. Persistence and degradability

CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE	
Persistence and degradability	May cause long-term adverse effects in the environment.

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)	
Persistence and degradability	Biodegradability: Result: < 5 % - Not readily biodegradable.

CARBOFURAN (RING-13C6, 99%) (1563-66-2 (unlabeled))	
Persistence and degradability	Not available.

#### 12.3. Bioaccumulative potential

CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE	
Log Pow	-.27
Bioaccumulative potential	Not available.

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)	
Log Pow	-.27
Bioaccumulative potential	Not available.

CARBOFURAN (RING-13C6, 99%) (1563-66-2 (unlabeled))	
Bioaccumulative potential	Not available.

#### 12.4. Mobility in soil

CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE	
Ecology - soil	Not available.

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)	
Ecology - soil	Not available.

CARBOFURAN (RING-13C6, 99%) (1563-66-2 (unlabeled))	
Ecology - soil	Not available.

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

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 : Hazardous waste due to toxicity.

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### SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

#### 14.1. UN number

UN-No.(DOT) : 1165  
DOT NA no. UN1165

#### 14.2. UN proper shipping name

DOT Proper Shipping Name : Dioxane  
Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger  
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.  
DOT Packaging Exceptions (49 CFR 173.xxx) : 150  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202  
DOT Packaging Bulk (49 CFR 173.xxx) : 242

#### 14.3. Additional information

Other information : No supplementary information available.

#### Overland transport

Packing group (ADR) : II  
Class (ADR) : 3 - Flammable liquid  
Hazard identification number (Kemler No.) : 33  
Classification code (ADR) : F1  
Danger labels (ADR) : 3 - Flammable liquids



Orange plates : An orange rectangular label with a black border. It is divided into two horizontal sections. The top section contains the number '33' and the bottom section contains the number '1165'.

Tunnel restriction code : D/E  
Limited quantities (ADR) : 1L  
EAC : •2YE  
Excepted quantities (ADR) : E2

#### Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

MFAG-No : 127



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### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L  
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L  
CFR 175.75)

Civil Aeronautics Law : Flammable liquids

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

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

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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#### 1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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### 15.2. International regulations

#### CANADA

#### CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE

Listed on the Canadian DSL (Domestic Substances List) inventory.

#### 1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

#### CARBOFURAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE()

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List WARNING! This product contains a chemical known by the state of California to cause cancer.
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#### 1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)

U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
WARNING! This product contains a chemical known by the state of California to cause cancer.

## SECTION 16: Other information

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Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

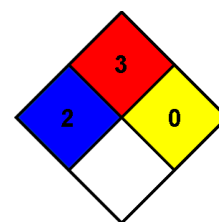
Full text of R-, H- and EUH-phrases::

Acute Tox. 1 (Oral)	Acute toxicity (oral) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H300	Fatal if swallowed
H301	Toxic if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H413	May cause long lasting harmful effects to aquatic life
R11	Highly flammable
R19	May form explosive peroxides
R20/21	Harmful by inhalation and in contact with skin
R25	Toxic if swallowed
R36/37	Irritating to eyes and respiratory system
R40	Limited evidence of a carcinogenic effect
F	Highly flammable
T	Toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

### CIL Mixture SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*