



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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/04/2020

Revision date:

Version: 1.0

CLM-10427-S

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

1.1. Product identifier

Product form : Mixtures
Product name : CARBOSULFAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE
Product code : CLM-10427-S

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

1.2.1. Relevant identified uses

Main use category : Professional use
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 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 hazard classes and H-statements : see section 16

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

Carc.Cat.3; R40
F; R11
Xi; R36
Xi; R37

Full text of R-phrases: see section 16

GHS-US classification

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

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Liver, Kidney, Central nervous system.

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

CLM-10427-

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Label elements

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

Hazard pictograms (CLP)



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 (in contact with skin, if inhaled, if swallowed)

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, vapors, spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.

GHS-US labeling

Hazard pictograms (GHS-US)



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, oral, Inhalation)

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, spray, vapors, mist.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
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
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 doctor, a POISON CENTER if you feel unwell
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO₂), dry extinguishing powder to extinguish.
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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

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

CLM-10427-S

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.) 204-661-8 (EC Index-No.) 603-024-00-5 (REACH-no) 01-2119462837-26	99.9903	F; R11 Xi; R36/37 Carc.Cat.3; R40
CARBOSULFAN (RING-13C6, 99%)	(CAS-No.) 55285-14-8 (Unlabeled) (EC-No.) 259-565-9 (Unlabeled) (EC Index-No.) 006-084-00-5 (Unlabeled)	0.0097	N; R50/53 T; R23/25 R43

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.) 204-661-8 (EC Index-No.) 603-024-00-5 (REACH-no) 01-2119462837-26	99.9903	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335
CARBOSULFAN (RING-13C6, 99%)	(CAS-No.) 55285-14-8 (Unlabeled) (EC-No.) 259-565-9 (Unlabeled) (EC Index-No.) 006-084-00-5 (Unlabeled)	0.0097	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
1,4-DIOXANE (P-DIOXANE) UNLABELED	(CAS-No.) 123-91-1	99.9903	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335
CARBOSULFAN (RING-13C6, 99%)	(CAS-No.) 55285-14-8 (Unlabeled)	0.0097	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention. 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	: Wash with plenty of soap and water. Get immediate medical advice/attention. Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

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

Symptoms/effects	: Suspected of causing cancer.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

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 : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.

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

CLM-10427-S

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

5.3. Advice for firefighters

- Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.

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 open flames. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid breathing vapors, mist, gas. Avoid dust formation. Use personal protective equipment as required. Ensure adequate air ventilation. Evacuate danger area.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

- Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Dike and contain spill. Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.
Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

- For further information refer to section 13.

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 : Avoid breathing dust, mist or spray. 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. Avoid breathing dust, fume, gas, mist, spray, vapors. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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 Lighting equipment, ventilating 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

CARBOSULFAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Liver damage. Confirmed animal carcinogen with unknown relevance to humans. Danger of cutaneous absorption.
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	3.6 mg/m ³ Potential Occupational Carcinogen. 30 minute ceiling value.
USA NIOSH	NIOSH REL (ceiling) (ppm)	1 ppm Potential Occupational Carcinogen. 30 minute ceiling value.

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

CLM-10427-

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

CARBOSULFAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	90 mg/m ³ Skin notation.
USA OSHA	OSHA PEL (TWA) (ppm)	25 ppm Skin notation.
USA OSHA	Remark (OSHA)	TWA 100 ppm; 360 mg/m ³ Skin Designation. The value in mg/m ³ is approximate.

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Liver damage. Confirmed animal carcinogen with unknown relevance to humans. Danger of cutaneous absorption.
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	3.6 mg/m ³ Potential Occupational Carcinogen. 30 minute ceiling value.
USA NIOSH	NIOSH REL (ceiling) (ppm)	1 ppm Potential Occupational Carcinogen. 30 minute ceiling value.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	90 mg/m ³ Skin notation.
USA OSHA	OSHA PEL (TWA) (ppm)	25 ppm Skin notation.
USA OSHA	Remark (OSHA)	TWA 100 ppm; 360 mg/m ³ Skin Designation. The value in mg/m ³ is approximate.

DNEL : 21 mg/m³ Skin contact - Long-term systemic effects

8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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



Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

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 g/mol

Color : Colorless

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

Auto-ignition temperature : 375 °C (707 °F)

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

Specific gravity / density : 1.03 g/ml at 25 °C (77 °F)

Solubility : Water: completely miscible

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

CLM-10427-

Safety Data Sheet

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Log Pow	: -0.27
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
Explosion limits	: 2 - 22 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

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

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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 ³ 2 h - Sense Organs and Special Senses (Nose, Eye, Ear and Taste): Eye: Other.
ATE CLP (oral)	4200.000 mg/kg body weight
ATE CLP (dermal)	7858.000 mg/kg body weight
ATE CLP (vapors)	46.000 mg/l/4h
ATE CLP (dust, mist)	46.000 mg/l/4h

CARBOSULFAN (RING-13C6, 99%) (55285-14-8 (Unlabeled))	
LD50 oral rat	51 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	1530 mg/m ³ - 1 h
ATE CLP (oral)	100.000 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 pH: 6.0 - 8 at 500 g/l at 20 °C (68 °F)
Serious eye damage/irritation	: Causes serious eye irritation. pH: 6.0 - 8 at 500 g/l at 20 °C (68 °F)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	: Not classified

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

CLM-10427-S

Safety Data Sheet

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Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: 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.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

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)	> 500 mg/l Desmodesmus subspicatus (green algae) - 72 h

CARBOSULFAN (RING-13C6, 99%) (55285-14-8 (Unlabeled))	
LC50 fish 1	0.071 mg/l Pollimyrus isidori - 72 h

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

CARBOSULFAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE	
Log Pow	-0.27

1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)	
Log Pow	-0.27
Bioaccumulative potential	Does not bioaccumulate.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

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.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Dispose of as unused product.

SECTION 14: Transport information

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

14.1. UN number

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

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Dioxane
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

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

CLM-10427-

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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
Hazard labels (ADR) : 3 - Flammable liquids



Orange plates : 

Tunnel restriction code (ADR) : 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

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

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

CLM-10427-S

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

CARBOSULFAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
CARBOSULFAN (RING-13C6, 99%) (55285-14-8 (Unlabeled))	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

CARBOSULFAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE
Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

CARBOSULFAN (RING-13C6, 99%) 100 UG/ML IN 1,4-DIOXANE()				
U.S. - California - Proposition 65 - Carcinogens List	Yes			
U.S. - California - Proposition 65 - Developmental Toxicity	No			
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No			
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No			
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			
1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
CARBOSULFAN (RING-13C6, 99%) (55285-14-8 (Unlabeled))				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)

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

CLM-10427-

S Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

CARBOSULFAN (RING-13C6, 99%) (55285-14-8 (Unlabeled))				
No	No	No	No	
1,4-DIOXANE (P-DIOXANE) UNLABELED (123-91-1)				
State or local regulations				
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List				
CARBOSULFAN (RING-13C6, 99%) (55285-14-8 (Unlabeled))				
State or local regulations				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List				

SECTION 16: Other information

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.

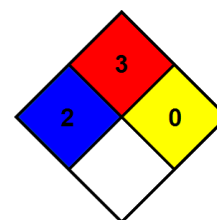
Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) 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 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R23/25	Toxic by inhalation and if swallowed
R36	Irritating to eyes
R36/37	Irritating to eyes and respiratory system
R37	Irritating to respiratory system
R40	Limited evidence of a carcinogenic effect
R43	May cause sensitization by skin contact
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



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

CLM-10427-

S

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard 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