

## 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

Version: 1.1

Date of issue: 24/10/2017 Revision date: 18/07/2018 Supersedes: 24/10/2017

CNLM-9940-S

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

1.1. Product identifier

Product form : Mixtures

Product name : CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-

13C3,99%;15N,98%)

Product code : CNLM-9940-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

ΙΙςΔ

USA: 1-800-322-1174 Int: 1-978-749-8000 <a href="mailto:cilsales@isotope.com">cilsales@isotope.com</a> 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
Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Acute Tox. 3 (Inhalation) H331
Skin Irrit. 2 H315
Eye Irrit. 2 H319
STOT SE 1 H370

Full text of hazard classes and H-statements : see section 16

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

F; R11

T; R39/23/24/25 Xi; R36/38

Full text of R-phrases: see section 16

## **GHS-US** classification

Flam. Liq. 2 H225
Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Acute Tox. 3 (Inhalation) H331
Skin Irrit. 2 H315
Eye Irrit. 2 H319
STOT SE 1 H370

Full text of H statements : see section 16

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## Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)

Signal word (CLP)







: Danger

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

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation

H370 - Causes damage to organs (central nervous system, eyes, heart, kidneys, liver) (if

inhaled, if swallowed, in contact with skin)

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 P260 - Do not breathe dust, fume, gas, mist, spray, vapors. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

#### **GHS-US** labeling

Hazard pictograms (GHS-US)







GHS06

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapour

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H315 - Causes skin irritation H319 - Causes serious eye irritation

H370 - Causes damage to organs (eyes, kidneys, liver, heart, central nervous system) (Dermal,

Inhalation, oral)

Precautionary statements (GHS-US) : P210 - Keep away from heat, 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.
P260 - Do not breathe dust, fume, mist, gas, spray, vapors.
P261 - Avoid breathing dust, fume, gas, spray, vapors, mist.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective clothing, protective gloves.

P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER

P302+P352 - If on skin: Wash with plenty of water

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 P307+P311 - If exposed: Call a poison center/doctor

P311 - Call a doctor, a POISON CENTER

P312 - Call a doctor, a POISON CENTER if you feel unwell

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P321 - Specific treatment (see Hazardous component(s) for labeling on this label)

P322 - Specific treatment (see Hazard pictograms (CLP) on this label)

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

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

P362+P364 - Take off contaminated clothing and wash it before reuse.

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

PBT: not relevant - no registration required

## **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
100% METHANOL UNLABELED	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	99.987359	F; R11 T; R39/23/24/25 Xi; R36/38
CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)	(CAS-No.) 210880-92-5 (Unlabeled) (EC Index-No.) 613-307-00-5 (Unlabeled)	0.013	N; R50/53 N; R58
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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
100% METHANOL UNLABELED	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X (REACH-no) 01-2119433307-44	99.987359	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 1, H370
CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)	(CAS-No.) 210880-92-5 (Unlabeled) (EC Index-No.) 613-307-00-5 (Unlabeled)	0.013	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
100% METHANOL UNLABELED	(CAS-No.) 67-56-1	99.987359	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 1, H370
CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)	(CAS-No.) 210880-92-5 (Unlabeled)	0.013	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 : Call a POISON CENTER or doctor/physician. Specific treatment (see Hazard pictograms (CLP)

on this label).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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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. Specific measures (see Hazard pictograms (CLP) on this label). Wash contaminated clothing before reuse. If skin irritation occurs: Gently wash with plenty of soap and water, Get immediate medical advice/attention. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label).

First-aid measures after eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

First-aid measures after ingestion

Rinse mouth. Obtain emergency medical attention. Immediately call a poison center or doctor/physician. Specific treatment (see Hazard pictograms (CLP) on this label).

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

Symptoms/effects

: Causes damage to organs (Eyes, heart, liver, kidneys, central nervous system) (in contact with skin, if inhaled, if swallowed).

Symptoms/effects after inhalation

Toxic if inhaled Symptoms/effects after skin contact

Symptoms/effects after eye contact

Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.

Causes serious eve irritation.

Symptoms/effects after ingestion

Toxic if swallowed. Swallowing a small quantity of this material will result in serious health

#### Indication of any immediate medical attention and special treatment needed 4.3.

No additional information available

## **SECTION 5: Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media : Dry powder. Dry sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

## Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapor-air mixture.

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

#### Advice for firefighters 5.3.

Firefighting instructions

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

Protection during firefighting

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Wear recommended personal protective equipment.

Other information : Use water spray to cool exposed surfaces.

## **SECTION 6: Accidental release measures**

## 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** 

: Wear respiratory protection. Do not breathe dust, mist, gas, spray, vapors, fume. Avoid contact with skin, eyes and clothing. Ventilate spillage area. Remove all sources of ignition. No open flames, no sparks, and no smoking. Ensure adequate air ventilation. Special attention should be given to low areas/pits where flammable vapors can accumulate.

#### 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".

## **Environmental precautions**

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

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

For containment

Methods for cleaning up

Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. 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.

## Reference to other sections

For further information refer to section 13.

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## **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 open flames. No smoking. Use only non-sparking tools. Do not breathe vapors, spray, mist,

gas, fume, dust.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly

after handling.

## 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

CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.
USA NIOSH	NIOSH REL (TWA) (mg/m³)	260 mg/m³ Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m³)	325 mg/m³ Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Potential for dermal absorption.
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (mg/m³)	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (ppm)	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (Ceiling) (ppm)	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.
100% METHANOL UNLABELED (67-56-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	250 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)

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100% METHANOL UNLABELED (67-56-1)		
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Headache. Nausea. Dizziness. Eye damage. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Danger of cutaneous absorption.
USA NIOSH	NIOSH REL (TWA) (mg/m³)	260 mg/m³ Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m³)	325 mg/m³ Basis: NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm Basis: NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Potential for dermal absorption.
USA OSHA	OSHA PEL (TWA) (mg/m³)	260 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
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USA OSHA	OSHA PEL (STEL) (mg/m³)	325 mg/m³ Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (STEL) (ppm)	250 ppm Basis: USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	OSHA PEL (Ceiling) (ppm)	1000 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
USA OSHA	Remark (OSHA)	The value in mg/m3 is approximate. Skin notation.

CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)		
DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	40 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	260 mg/m³	
Acute - local effects, dermal	260 mg/cm <sup>2</sup>	
Long-term - systemic effects, dermal	40 mg/kg bodyweight/day	
Long-term - local effects, dermal	260 mg/cm <sup>2</sup>	
Long-term - local effects, inhalation	260 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	8 mg/kg body weight	
Acute - systemic effects, inhalation	50 mg/m³	
Acute - systemic effects, oral	8 mg/kg body weight	
Acute - local effects, inhalation	50 mg/m³	
Long-term - systemic effects,oral	8 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	50 mg/m³	
Long-term - systemic effects, dermal	8 mg/kg bodyweight/day	
Long-term - local effects, inhalation	50 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	154 mg/l	
PNEC aqua (marine water)	15.4 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	570.4 mg/kg dwt	
PNEC (Soil)		
PNEC soil	23.5 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	100 mg/kg	

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#### 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.

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

recommended.

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 : 32.04 g/mol

Color : Colorless

Odor : Pungent

Odor threshold : No data available pH : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : -98 °C (-144 °F) Freezing point : No data available Boiling point : 64.7 °C (148.5 °F)

Flash point : 9.7 °C (49.5 °F) - closed cup

Auto-ignition temperature :  $455 \, ^{\circ}\text{C} \, (851 \, ^{\circ}\text{F})$  at 1,013 hPa (760 mmHg)

Decomposition temperature : No data available

Flammability (solid, gas) : Highly flammable liquid and vapour

Vapor pressure : 130.3 hPa (97.7 mmHg) at 20 °C (68 °F); 169.27 hPa (126.96 mmHg) at 25 °C (77 °F)

Vapor pressure at 50 °C : 546.6 hPa (410 mmHg) at 50 °C (122 °F)

Relative vapor density at 20 °C : 1.11

Relative density : No data available

 $\label{eq:specific gravity / density} Specific gravity / density : 0.791 g/ml at 25 °C (77 °F) \\ Solubility : Water: Completely miscible$ 

Log Pow : -0.77

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : Product is not explosive.

Oxidizing properties : Non oxidizing material according to EC criteria.

Explosion limits : 6 - 36 % (V)

## 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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

### 10.2. Chemical stability

See storage and expiration date on CoA.

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#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

Acid anhydrides. Acid chlorides. Oxidizing agent. Alkali Metal Amides. Reducing agents. Acids.

#### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

exposure

symptoms

Aspiration hazard

Potential Adverse human health effects and

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

11.1. Information on toxicological effects	
Acute toxicity	: Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.
CLOTHIANIDIN (100 UG/ML IN METHANOL) (	(METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)
LD50 oral rat	1187 - 2769 mg/kg
LD50 dermal rabbit	17100 mg/kg
LC50 inhalation rat (mg/l)	128.2 mg/l/4h ; 87.6 mg/l - 6 h
ATE CLP (oral)	100.013 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
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
CLOTHIANIDIN (METHYLENE-13C,99%;THIA	XZOLE-13C3,99%;15N,98%) (210880-92-5 (Unlabeled))
LD50 oral rat	> 5,000 mg/kg
LD50 dermal rat	> 2,000 mg/kg
LC50 inhalation rat (mg/l)	> 5538 mg/m³ - 4 h
100% METHANOL UNLABELED (67-56-1)	
LD50 oral rat	1187 - 2769 mg/kg
LD50 dermal rabbit	17100 mg/kg
LC50 inhalation rat (mg/l)	128.2 mg/l/4h ; 87.6 mg/l - 6 h
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	128.200 mg/l/4h
LDLO, oral, human	143 mg/kg Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Skin corrosion/irritation	: Skin. Rabbit. Result: No skin irritation
Serious eye damage/irritation	: Eyes. Rabbit. Result: No eye irritation
Respiratory or skin sensitization	: Maximisation Test . Guinea pig. Did not cause sensitization. (OECD 406 method)
Germ cell mutagenicity	: AMES test: S. tymphimurium. Result: negative. fibroblast. Result: Negative. Mutation in mammalian somatic cells. Mutagenicity (in vivo mammalian bone-marrow cystogenetic test, chromosomal analysis) - Mouse - male and female Result: negative. Mouse - male and female. Result: Negative
Carcinogenicity	: Not classified
Reproductive toxicity	: Damage to fetus not classifiable. Fertility classification not possible from current data.
Specific target organ toxicity – single exposure	: Causes damage to organs through prolonged or repeated exposure Causes damage to organs
Specific target organ toxicity – repeated	: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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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. Effects due to Ingestion may include: Headache. Dizziness. Drowsiness. metabolic acidosis. Coma. May be fatal if swallowed and enters airways. If swallowed there is a risk of blindness. Effects on humans.

No data available

stomach.

: No aspiration toxicity classification.

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Symptoms/effects after inhalation : Toxic if inhaled.

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

health hazard. Toxic in contact with skin. Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Toxic if swallowing a small quantity of this material will result in serious health

hazard.

## **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.

CLOTHIANIDIN (100 UG/ML IN METHAI	NOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)	
LC50 fish 1	15400 mg/l mortality - Lepomis machrochirus (Bluegill) - 96 h	
EC50 Daphnia 1	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 Daphnia 2	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	
CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%) (210880-92-5 (Unlabeled))		
LC50 fish 1	> 104.2 mg/l Oncorhynchus mykiss (rainbow trout) - 96.0 h	
EC50 Daphnia 1	> 119 mg/l - Daphnia magna (Water flea) - 48 h	
ErC50 (algae)	> 120 mg/l - other microorganisms - 72 h	
100% METHANOL UNLABELED (67-56-	1)	
LC50 fish 1	15400 mg/l mortality LC50 - Lepomis machrochirus (Bluegill) - 96 h	
EC50 Daphnia 1	> 10000 mg/l Daphnia magna (Water flea) - 48 h	
EC50 Daphnia 2	22000 mg/l Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 96 h	
NOEC (acute)	7900 mg/l Oryzias latipes - 200 h	

## 12.2. Persistence and degradability

1200 mg/g
mg/g
mg/g
- rapidly biodegradable aerobic - Exposure time 5 d

## CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%) (210880-92-5 (Unlabeled))

Persistence and degradability

May cause long-term adverse effects in the environment.

100% METHANOL UNLABELED (67-56-1)	
Biochemical oxygen demand (BOD)	600 - 1200 mg/g
Chemical oxygen demand (COD)	1420 mg/g
ThOD	1500 mg/g
Biodegradation	72 % - rapidly biodegradable aerobic - Exposure time 5 d

## 12.3. Bioaccumulative potential

CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)	
BCF fish 1	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1
Log Pow	-0.77

## CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%) (210880-92-5 (Unlabeled))

og Pow 0.9 at 25 °C (77 °F)

## 100% METHANOL UNLABELED (67-56-1)

100% METHATOL OTEABLED (07 00 1)	
BCF fish 1	5 mg/l Cyprinus carpio (Carp) - 72 d at 20 °C
Bioconcentration factor (BCF REACH)	1
Log Pow	-0.77

## 12.4. Mobility in soil

CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)		
Ecology - soil	Not degradable in the soil.	
100% METHANOL UNLABELED (67-56-1)		
Ecology - soil	Not degradable in the soil.	

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

#### CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)

PBT: not relevant - no registration required

#### 100% METHANOL UNLABELED (67-56-1)

PBT: not relevant - no registration required

## 12.6. Other adverse effects

Other adverse effects : Avoid release to the environment.

Other information : Stability in water: at 19 °C - (83 - 91%) - 72 h. Remarks: Hydrolyses on contact with water.

Hydrolyses readily.

## **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) : 1230 DOT NA no. UN1230

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Methanol

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid

6.1 - Poison





DOT Symbols : + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group,I - Proper

shipping name appropriate for international and domestic transportation

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.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C

(59 F) and 50 C (122 F), respectively.

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

Emergency Response Guide (ERG) Number : 131

Other information : No supplementary information available.

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#### **Overland transport**

Packing group (ADR) : II

Class (ADR) : 3 - Flammable liquid

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

Hazard labels (ADR) : 3 - Flammable liquids

6.1 - Toxic substances

336

: E2



Orange plates

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) 11

Transport by sea

Excepted quantities (ADR)

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

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.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

MFAG-No : 131

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 1 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

CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)			
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313			
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		

CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%) (210880-92-5 (Unlabeled))		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313	

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100% METHANOL UNLABELED (67-56-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CERCLA RQ	5000 lb	
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	

## 15.2. International regulations

#### **CANADA**

#### CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)

Listed on the Canadian DSL (Domestic Substances List)

#### 100% METHANOL UNLABELED (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

No additional information available

#### 15.3. US State regulations

CLOTHIANIDIN (100 UG/ML IN METHANOL) (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%)		
U.S California - Proposition 65 - Carcinogens List	No	
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 Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations 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 U.S New York - Reporting of Releases Part 597 - List of Hazardous Substances	
CLOTHIANIDIN (METHYLENE 42C 00% /THIA7OLE 42C2 00% /4EN 00%) //240000 02 F //Inicholdd\\		

#### CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%) (210880-92-5 (Unlabeled)) U.S. - California -U.S. - California U.S. - California -No significant risk level U.S. - California (NSRL) Proposition 65 -Proposition 65 -Proposition 65 -Proposition 65 -Carcinogens List **Developmental Toxicity** Reproductive Toxicity -Reproductive Toxicity -Female Male No No No No

## **100% METHANOL UNLABELED (67-56-1)**

U.S California - Proposition 65 -	No significant risk level (NSRL)			
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	
No	Yes	No	No	

### CLOTHIANIDIN (METHYLENE-13C,99%;THIAZOLE-13C3,99%;15N,98%) (210880-92-5 (Unlabeled))

### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

## 100% METHANOL UNLABELED (67-56-1)

#### State or local regulations

- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List

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## **100% METHANOL UNLABELED (67-56-1)**

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances

## **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 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) 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
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H370	Causes damage to organs
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R36/38	Irritating to eyes and skin
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R58	May cause long-term adverse effects in the environment
F	Highly flammable
N	Dangerous for the environment
Т	Toxic
Xi	Irritant

NFPA health hazard

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

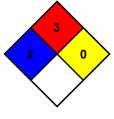
NFPA fire hazard

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.



## **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

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