

## 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: 15/11/2018 Revision date: Version: 1.0

CLM-6758-S

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

**Product identifier** 

Product form : Mixtures

Product name : 4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN

**ACETONITRILE** 

: CLM-6758-S Product code

#### 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

Uses advised against

No additional information available

## Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA: 1-800-322-1174 Int: 1-978-749-8000 www.isotope.com cilsales@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**

## Classification of the substance or mixture

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

Flam. Liq. 2 H225 Acute Tox. 4 (Oral) H302 Acute Tox. 4 (Dermal) H312 Acute Tox. 4 (Inhalation) H332 Eye Irrit. 2 H319

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 Xi; R36

Xn; R20/21/22

Full text of R-phrases: see section 16

## **GHS-US classification**

Flam. Liq. 2 H225 H302 Acute Tox. 4 (Oral) Acute Tox. 4 (Dermal) H312 Acute Tox. 4 (Inhalation) H332 Eve Irrit. 2 H319

Full text of H statements: see section 16

## Adverse physicochemical, human health and environmental effects

Lungs, Blood, Kidney, Liver, Central nervous system.

15/11/2018 EN (English US) 1/11

## 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 : ACETONITRILE UNLABELED

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

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H319 - Causes serious eye irritation

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 vapors, mist, gas.

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)





Signal word (GHS-US) : Danger

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

H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H319 - Causes serious eye irritation

Precautionary statements (GHS-US) 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 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 eye protection, face protection, protective clothing, protective gloves.

P301+P312 - If swallowed: Call a doctor if you feel unwell

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 P312 - Call a doctor if you feel unwell

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

P330 - Rinse mouth

P337+P313 - If eye irritation persists: Get medical advice/attention. 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+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

## Other hazards

No additional information available

EN (English US) 15/11/2018 2/11

## 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**

## **Substances**

Not applicable

3.2. Mixtures			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
ACETONITRILE UNLABELED	(CAS-No.) 75-05-8 (EC-No.) 200-835-2 (EC Index-No.) 608-001-00-3 (REACH-no) 01-2119471307-38	99.987	F; R11 Xi; R36 Xn; R20/21/22
4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%)	(CAS-No.) 94-74-6 (Unlabeled) (EC-No.) (EC Index-No.)	0.013	Xn; R22 C; R35 Xi; R41 N; R50/53
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ACETONITRILE UNLABELED	(CAS-No.) 75-05-8 (EC-No.) 200-835-2 (EC Index-No.) 608-001-00-3 (REACH-no) 01-2119471307-38	99.987	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319
4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%)	(CAS-No.) 94-74-6 (Unlabeled) (EC-No.) (EC Index-No.)	0.013	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Name	Product identifier	%	GHS-US classification
ACETONITRILE UNLABELED	(CAS-No.) 75-05-8	99.987	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319
4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%)	(CAS-No.) 94-74-6 (Unlabeled)	0.013	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

**Description of first aid measures** 

## **SECTION 4: First aid measures**

First-aid measures general	: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Evacuate area.
First-aid measures after inhalation	: Move the affected person away from the contaminated area and into the fresh air. If not breathing, give artificial respiration. Call a physician immediately. Get immediate medical advice/attention.
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. Specific measures (see Hazard pictograms (CLP) on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Get

immediate medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

0	
Symptoms/effects after inhalation	Harmful if inhaled May cause respiratory irritation

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

health hazard. Harmful in contact with skin.

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

Symptoms/effects after ingestion Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

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

No additional information available

First-aid measures after eye contact

15/11/2018 EN (English US) 3/11

## 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 5: Firefighting measures**

## **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 vapour.

Explosion hazard : May form flammable/explosive vapor-air mixture. Reactivity : Vapors may form explosive mixture with air.

### Advice for firefighters

: Wear a self contained breathing apparatus. Fight fire with normal precautions from a Firefighting instructions

reasonable distance.

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

Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

Other information : Use water spray to cool unopened containers.

## **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 Use personal protective equipment as required. Avoid breathing vapors, mist, gas. Ensure adequate air ventilation. Evacuate unnecessary personnel. Eliminate all ignition sources if safe

to do so. Provide adequate ventilation to minimize dust and/or vapor concentrations. Special attention should be given to low areas/pits where flammable vapors can accumulate.

#### 6.1.2. For emergency responders

: For further information refer to section 8: "Exposure controls/personal protection". Protective equipment

## **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

: Dike and contain spill. Disposal should be in accordance with applicable Federal, State and For containment

local regulations

Methods for cleaning up Collect spillage. Small quantities of liquid spill: take up in non-combustible absorbent material

and shovel into container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

## Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

## Precautions for safe handling

Additional hazards when processed Avoid all eye and skin contact and do not breathe vapor and mist. Keep away from sources of

ignition - No smoking. Take precautionary measures against static discharges. Handle empty

containers with care because residual vapors are flammable.

Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash hands, forearms and face thoroughly after handling.

## Conditions for safe storage, including any incompatibilities

Proper grounding procedures to avoid static electricity should be followed. Ground/bond Technical measures

container and receiving equipment. Use explosion-proof Lighting equipment, ventilating

equipment.

Storage conditions Store refrigerated (-5°C to 5°C). Protect from light.

Heat sources Incompatible materials

## Specific end use(s)

No additional information available

15/11/2018 EN (English US) 4/11

## 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 8: Exposure controls/personal protection

## 8.1. Control parameters

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen.
USA NIOSH	NIOSH REL (TWA) (mg/m³)	34 mg/m³ Forms Cyanide in the body.
USA NIOSH	NIOSH REL (TWA) (ppm)	20 ppm Forms Cyanide in the body.
USA OSHA	OSHA PEL (TWA) (mg/m³)	70 mg/m³ The value in mg/m3 is approximate.
USA OSHA	OSHA PEL (TWA) (ppm)	40 ppm The value in mg/m3 is approximate.

ACETONITRILE UNLABELED (75-05-8)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Lower Respiratory Tract irritation. Not classifiable as a human carcinogen.
USA NIOSH	NIOSH REL (TWA) (mg/m³)	34 mg/m³ Forms Cyanide in the body.
USA NIOSH	NIOSH REL (TWA) (ppm)	20 ppm Forms Cyanide in the body.
USA OSHA	OSHA PEL (TWA) (mg/m³)	70 mg/m³ The value in mg/m3 is approximate.
USA OSHA	OSHA PEL (TWA) (ppm)	40 ppm The value in mg/m3 is approximate.

## 8.2. Exposure controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety procedures.

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









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

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 : 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, clear

Molecular mass : 41.05 g/mol

Color : Colorless

Odor : Ether-like

Odor threshold : No data available

Odor threshold : No data available

PRelative evaporation rate (butyl acetate=1) : No data available

Melting point : -48 °C (-54°F)

Freezing point : No data available

Solling point : No data available

81 - 82 °C (178 - 180 °F)

Flash point : 2 °C (35.6 °F) - closed cup

Auto-ignition temperature : 523 °C (973 °F)

Decomposition temperature : No data available

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

Vapor pressure : 73.18 hPa (54.89 mmHg) at 15°C (59 °F), 119.81 hPa (89.86 mmHg) at 25°C(77 °F)

Relative vapor density at 20 °C : 1.42 - (Air = 1.0)

Relative density : No data available

Specific gravity / density : 0.786 g/ml

Solubility : Water: 100 %

15/11/2018 EN (English US) 5/11

## 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

Log Pow : -0.34

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 : 4.4 - 16 vol %

## 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

Highly flammable liquid and vapour.

### 10.4. Conditions to avoid

Heat. Open flame. Direct sunlight. Sparks. Extremely high or low temperatures.

## 10.5. Incompatible materials

Acids, Bases, Oxidizing agents, Reducing agents, Alkali metals.

## 10.6. Hazardous decomposition products

May release flammable gases. Carbon oxides (CO, CO2). Nitrogen oxides.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin. Inhalation: Harmful if inhaled.

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE		
LD50 oral rat	2460 mg/kg	
LD50 dermal rabbit	2000 mg/kg	
LC50 inhalation rat (mg/l)	≥ 26.8 mg/l	
LC50 inhalation rat (ppm)	7551 ppm - 8h	
ATE CLP (oral)	500.000 mg/kg body weight	
ATE CLP (dermal)	2000.000 mg/kg body weight	
ATE CLP (gases)	4500.000 ppmV/4h	
ATE CLP (vapors)	11.000 mg/l/4h	
ATE CLP (dust, mist)	1.500 mg/l/4h	

ACETONITRILE UNLABELED (75-05-8)	
LD50 oral rat	2460 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (mg/l)	≥ 26.8 mg/l
LC50 inhalation rat (ppm)	7551 ppm - 8h
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	2000.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) (94-74-6 (Unlabeled))		
LD50 oral rat	700 mg/kg Gastrointetinal disturbance. Somnolence. Liver: Fatty liver degeneration.	
LD50 dermal rabbit	> 2000 mg/kg	
ATE CLP (oral)	500.000 mg/kg body weight	

Skin corrosion/irritation : Not classified

Skin - Rabbit - No skin irritation

Serious eye damage/irritation : Causes serious eye irritation.

Rabbit - Eyes - Irritating to eyes

15/11/2018 EN (English US) 6/11

## 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

Respiratory or skin sensitization : Did not cause sensitization on laboratory animals. Buehler Test - guinea pig - Did not cause

sensitization on laboratory animals. (OECD 406 method)

Germ cell mutagenicity : Not classified

Carcinogenicity : No evidence of carcinogenicity in animal studies (when indicated).

Reproductive toxicity : Animal testing did not show any effects on fertility.

Specific target organ toxicity - single exposure : Not classified

The substance or mixture is not classified as specific target organ toxicant.

Specific target organ toxicity - repeated

exposure

Not classified

The substance or mixture is not classified as specific target organ toxicant.

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

Treat as cyanide poisoning. Always have on hand a cyanide first-aid kit, together with proper instructions. The onset of symptoms is generally delayed pending conversion to cyanide. Nausea, Vomiting, Diarrhea, Headache, Dizziness, Rash, Cyanosis, Excitement, Depression, Drowsiness, Impaired judgment, Lack of coordination, Stupor, Death. Lungs - Lung edema - Based on human evidence. Harmful if swallowed. Harmful in contact with skin. 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 : Harmful if inhaled. May cause respiratory irritation.

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

health hazard. Harmful in contact with skin.

Symptoms/effects after eye contact : Causes serious eye irritation

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Harmful if

swallowed.

## SECTION 12: Ecological information

## 12.1. Toxicity

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE			
LC50 fish 1	1640 mg/l Pimephales promelas (fathead minnow) - 96h		
EC50 Daphnia 1	3600 mg/l Daphnia magna (Water flea) - 48h		
NOEC (chronic)	640 mg/l Daphnia magna (Water flea) - 14d		
ACETONITRILE UNLABELED (75-05-8)			
LC50 fish 1	1640 mg/l Pimephales promelas (fathead minnow) - 96h		
EC50 Daphnia 1	3600 mg/l Daphnia magna (Water flea) - 48h		
NOEC (chronic)	640 mg/l Daphnia magna (Water flea) - 14d		
4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) (94-74-6 (Unlabeled))			
LC50 fish 1	91 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h		
EC50 Daphnia 1	> 180 mg/l Daphnia magna (Water flea) - 48 h		

## 12.2. Persistence and degradability

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE			
Persistence and degradability	Biodegradability	Result: - Readily biodegradable.	
ACETONITRILE UNLABELED (75-05-8)			
Persistence and degradability	Biodegradability	Result: - Readily biodegradable.	

## 12.3. Bioaccumulative potential

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE		
Log Pow	-0.34	
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).	

ACETONITRILE UNLABELED (75-05-8)	
Log Pow	-0.34
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).

## 12.4. Mobility in soil

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE		
Ecology - soil Not expected to absorb on soil.		
ACETONITRILE UNLABELED (75-05-8)		
Ecology - soil	Not expected to absorb on soil.	

15/11/2018 EN (English US) 7/11

## 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

## 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects

 Avoid release to the environment. Disposal must be done according to official regulations. May cause long lasting harmful effects to aquatic life.

## **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.

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) : 1648 DOT NA no. UN1648

## 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Acetonitrile

Class (DOT) : 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.

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.

150

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**

Hazard identification number (Kemler No.) : 33

Orange plates :

33 1648

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) 11
EAC : •2YE
Excepted quantities (ADR) : E2

15/11/2018 EN (English US) 8/11

## 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

## 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.

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

MFAG-No : 127

## Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5L

(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

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of 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	

ACETONITRILE UNLABELED (75-05-8)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of 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

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) (94-74-6 (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	Delayed (chronic) health hazard 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

## 4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE

Listed on the Canadian DSL (Domestic Substances List)

## 15.2.1. National regulations

No additional information available

## 15.3. US State regulations

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE		
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	

15/11/2018 EN (English US) 9/11

## 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

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) 100 UG/ML IN ACETONITRILE		
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	

ACETONITRILE UNLABELED (75-05-8)				
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)
No	No	No	No	

4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) (94-74-6 (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)
No	No	No	No	

## **ACETONITRILE UNLABELED (75-05-8)**

## 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

## 4-CHLORO-2-METHYLPHENOXYACETIC ACID (MCPA) (RING-13C6, 99%) (94-74-6 (Unlabeled))

## State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance 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. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
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 Dam. 1	Serious eye damage/eye irritation 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
H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R22	Harmful if swallowed
R35	Causes severe burns
R36	Irritating to eyes
R41	Risk of serious damage to eyes
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
С	Corrosive

15/11/2018 EN (English US) 10/11

## 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

F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

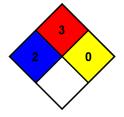
temporary incapacitation or residual injury.

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

15/11/2018 EN (English US) 11/11