

Page: 1 of 6

Revision: 04/26/2017 Supersedes Revision: 11/21/2015

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2006

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

**1.1 Product Code:** 10597

**Product Name:** 5-chloro-2-methyl-3-lsothiazolone

**Synonyms:** 5-chloro-2-methyl-3(2H)-isothiazolone; CMI; 5-chloro-2-methyl-4-lsothiazolin-3-one;

Chloromethylisothiazolinone; MCI; MCIT; Methylchloroisothiazolinone; CMIT;

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

**Relevant identified uses:** For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Cayman Chemical Company

1180 E. Ellsworth Rd. Ann Arbor, MI 48108

Web site address: www.caymanchem.com

Information: Cayman Chemical Company +1 (734)971-3335

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

CHEMTREC Outside USA and Canada: +1 (703)527-3887

### Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

Acute Toxicity: Oral, Category 3
Acute Toxicity: Skin, Category 3
Skin Corrosion/Irritation, Category 1B

Serious Eye Damage/Eye Irritation, Category 1

Skin Sensitization, Category 1

Specific Target Organ Toxicity (single exposure), Category 3

**Aquatic Toxicity (Acute), Category 1** 

2.2 Label Elements:









GHS Signal Word:

Danger

**GHS Hazard Phrases:** 

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.





Revision: 04/26/2017 Supersedes Revision: 11/21/2015

**GHS Precaution Phrases:** 

P260: Do not breathe {dust/fume/gas/mist/vapors/spray}.

P264: Wash {hands} thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

#### **GHS** Response Phrases:

P301+310: IF SWALLOWED: P310: Immediately call a POISON CENTER or doctor/physician.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P321: Specific treatment {see ... on this label}.

P330: Rinse mouth.

P333+313: If skin irritation or rash occurs, seek medical advice/attention.

P361+364: Take off immediately all contaminated clothing and wash it before reuse.

P362+364: Take off contaminated clothing and wash it before reuse.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

#### **GHS Storage and Disposal Phrases:**

Please refer to Section 7 for Storage and Section 13 for Disposal information.

**2.3** Adverse Human Health Causes severe skin burns serious eye damage.

**Effects and Symptoms:** Material may be irritating to the mucous membranes and upper respiratory tract.

May cause an allergic skin reaction.

May cause respiratory system irritation.

Toxic if swallowed or in contact with skin.

Very toxic to aquatic life.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

## Section 3. Composition/Information on Ingredients

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	100.0 %	247-500-7	Acute Tox.(O) 3: H301
NX8156850			NA	Acute Tox.(D) 3: H311
				Skin Corr. 1B: H314
				Skin Sens. 1: H317
				Eye Damage 1: H318
				STOT (SE) 3: H335
				Aquatic (A) 1: H400



Page: 3 of 6

Revision: 04/26/2017 Supersedes Revision: 11/21/2015

### Section 4. First Aid Measures

4.1 Description of First Aid

Measures:

**In Case of Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.

Get immediate medical attention.

In Case of Skin Contact: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated

clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined

and tested by medical personnel.

In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an

unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by

medical personnel.

## Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

**Media:** Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing A solid water stream may be inefficient.

Media:

5.2 Flammable Properties and No data available.

Hazards:

No data available.

Flash Pt: No data.

**Explosive Limits:** LEL: No data. UEL: No data.

Autoignition Pt: No data.

**5.3 Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or

equivalent), and full protective gear to prevent contact with skin and eyes.

#### Section 6. Accidental Release Measures

**6.1** Protective Precautions, Avoid raising and breathing dust, and provide adequate ventilation.

Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,

**Emergency Procedures:** and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

**6.2 Environmental** Take steps to avoid release into the environment, if safe to do so.

Precautions:

**6.3 Methods and Material For** Contain spill and collect, as appropriate.

Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.

Up:

## Section 7. Handling and Storage

**7.1 Precautions To Be Taken** Avoid breathing dust/fume/gas/mist/vapours/spray.

in Handling: Avoid prolonged or repeated exposure.

7.2 Precautions To Be Taken Keep container tightly closed.

in Storing: Store in accordance with information listed on the product insert.

## Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:





Revision: 04/26/2017 Supersedes Revision: 11/21/2015

8.2 Exposure Controls:

**8.2.1 Engineering Controls** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

(Ventilation etc.): levels below recommended exposure limits.

8.2.2 Personal protection equipment:

**Eye Protection:** Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

**Respiratory Equipment** NIOSH approved respirator, as conditions warrant.

(Specify Type):

**Physical States:** 

Work/Hygienic/Maintenan Do not take internally.

ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.

[ ] Solid

Wash thoroughly after handling.

No data available.

## Section 9. Physical and Chemical Properties

[X] Liquid

9.1	Information on Basic Physical and Chemical Properties	
J. I	IIIIOIIIIalioii oii basic riivsicai aliu cilellicai riobeilles	

[ ] Gas

information on basic rhysical and offentical rroperties

Appearance and Odor: a neat oil

pH: No data.
Melting Point: No data.
Boiling Point: No data.
Flash Pt: No data.
Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

No data.

Vapor Pressure (vs. Air or mm No data.

Hg):

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Solubility Notes: ~10 mg/ml in PBS (pH 7.2); ~30 mg/ml in EtOH, DMSO, & DMF;

Octanol/Water Partition

Coefficient:

Autoignition Pt: No data.

Decomposition Temperature: No data.

Viscosity: No data.

9.2 Other Information

Percent Volatile: No data.

Molecular Formula & Weight: C4H4CINOS 149.6



Page: 5 of 6

Revision: 04/26/2017 Supersedes Revision: 11/21/2015

Section 10. Stability and Reactivity

**10.1 Reactivity:** No data available.

**10.2 Stability:** Unstable [ ] Stable [ X ]

**10.3 Stability Note(s):** Stable if stored in accordance with information listed on the product insert.

Polymerization: Will occur [ ] Will not occur [ X ]

**10.4 Conditions To Avoid:** No data available.

10.5 Incompatibility - Materials strong oxidizing agents

To Avoid:

**10.6 Hazardous** carbon dioxide

Decomposition or carbon monoxide

Byproducts: hydrogen sulfide
nitrogen oxides

phosgene

### Section 11. Toxicological Information

**11.1** Information on The toxicological effects of this product have not been thoroughly studied.

**Toxicological Effects:** 

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	n.a.	n.a.	n.a.	n.a.

### Section 12. Ecological Information

**12.1 Toxicity:** Avoid release into the environment.

Runoff from fire control or dilution water may cause pollution.

**12.2** Persistence and No data available.

Degradability:

**12.3** Bioaccumulative No data available.

Potential:

**12.4 Mobility in Soil:** No data available.

12.5 Results of PBT and vPvB No data available.

assessment:

**12.6** Other adverse effects: No data available.

## Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

## Section 14. Transport Information

#### 14.1 LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Corrosive liquids, n.o.s.

**DOT Hazard Class:** 8 CORROSIVE

UN/NA Number: UN1760 Packing Group: II





Page: 6 of 6

Revision: 04/26/2017 Supersedes Revision: 11/21/2015

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Corrosive liquids, n.o.s.

**UN Number:** 1760 **Packing Group:** Ш

**Hazard Class:** 8 - CORROSIVE

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Corrosive liquids, n.o.s.

1760 **UN Number: Packing Group:** Ш 8 **Hazard Class:** 8 - CORROSIVE **IATA Classification:** 

Additional Transport Transport in accordance with local, state, and federal regulations.

When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of Information:

> E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

### Section 15. Regulatory Information

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	No	No	No
CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
26172-55-4	5-Chloro-2-methyl-4-isothiazolin-3-one	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 12(b); CA PROP.65: No		

This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) **Regulatory Information** 

No.1272/2008. Statement:

### Section 16. Other Information

**Revision Date:** 04/26/2017

Additional Information About No data available.

This Product:

Company Policy or Disclaimer: DISCLAIMER: This information is believed to be accurate and represents the best information

> currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for

their particular purposes.