Safety Data Sheet

Cat. # RC-168

Chloramphenicol USP Grade

Size: 25g
### SECTION 1: Identification

<table>
<thead>
<tr>
<th><strong>1.1. Identification</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product form</strong></td>
<td>Substance</td>
</tr>
<tr>
<td><strong>Substance name</strong></td>
<td>chloramphenicol</td>
</tr>
<tr>
<td><strong>CAS-No.</strong></td>
<td>: 56-75-7</td>
</tr>
<tr>
<td><strong>Product code</strong></td>
<td>: 679A</td>
</tr>
<tr>
<td><strong>Formula</strong></td>
<td>: C11H12Cl2N2O5</td>
</tr>
<tr>
<td><strong>Synonyms</strong></td>
<td>: (R-(R*,R*))-2,2-dichloro-N-[2-hydroxy-1-(hydroxymethyl)-2-(4-nitrophenyl)ethyl]acetamide</td>
</tr>
</tbody>
</table>
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1.2. Recommended use and restrictions on use
Use of the substance/mixture: Bactericide Fungicide

1.3. Supplier
Geno Technology, Inc./G-Biosciences
9800 Page Avenue
Saint Louis, 63132-1429 - United States
T 800-628-7730 - F 314-991-1504
technical@GBiosciences.com - www.GBiosciences.com

1.4. Emergency telephone number
Emergency number: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Carcinogenicity Category          H350          May cause cancer
1B
Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements
GHS-US labeling
Hazard pictograms (GHS-US): ⚠️
Signal word (GHS-US): Danger
Hazard statements (GHS-US): H350 - May cause cancer
Precautionary statements (GHS-US):
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
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 which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Substance type: Mono-constituent
# chloramphenicol

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<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name (Synonyms)</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
</table>

08/03/2018 EN (English US)
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<thead>
<tr>
<th>Name</th>
<th>Common Name (Synonyms)</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>chloramphenicol</td>
<td>(R-(R*,R*))-[2,2]-dichloro-N-[2-hydroxy-1-((4-nitrophenyl)ethyl)acetamide</td>
<td>(CAS-No.) 56-75-7</td>
<td></td>
<td>Carc. 1B, H350</td>
</tr>
</tbody>
</table>

08/03/2018
Full text of hazard classes and H-statements: see section 16

3.2. Mixtures
Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures


First-aid measures after inhalation: Remove the victim into fresh air.

First-aid measures after skin contact: Wash immediately with lots of water (15 minutes)/shower. Soap may be used. Remove clothing while washing.

First-aid measures after eye contact: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist. Do not apply neutralizing agents.

First-aid measures after ingestion: Rinse mouth with water. Victim is fully conscious: immediately induce vomiting. Ingestion of large quantities: immediately to hospital. Call Poison Information Centre (www.big.be/antigif.htm).

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after eye contact: Visual disturbances.


4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


5.2. Specific hazards arising from the chemical

Reactivity: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions: Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.


SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel


Emergency procedures: Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.

Measures in case of dust release: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

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 soil and water pollution. Prevent spreading in sewers.

6.3 Methods and material for containment and cleaning up
For containment: Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray.
Methods for cleaning up: Stop dust cloud by humidifying. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.
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
Precautions for safe handling: Avoid raising dust. Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep container tightly closed.
Hygiene measures: Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2 Conditions for safe storage, including any incompatibilities
Storage conditions: Store locked up. Store in a well-ventilated place. Keep cool.
Storage temperature: 20 °C
Heat-ignition: KEEP SUBSTANCE AWAY FROM: heat sources.
Information on mixed storage: KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids.
Storage area: Store in a dry area. Keep container in a well-ventilated place. Meet the legal requirements. Store at room temperature.
Special rules on packaging: SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials: SUITABLE MATERIAL: glass.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
chloramphenicol (56-75-7)
Not applicable

8.2 Appropriate engineering controls
Appropriate engineering controls: Ensure good ventilation of the work station.
Environmental exposure controls: Avoid release to the environment.

8.3 Individual protection measures/Personal protective equipment
Hand protection:
Gloves
Eye protection:
Face shield
Skin and body protection:
Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing
Respiratory protection:
Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus
### SECTION 9: Physical and chemical properties

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Crystalline solid. Needles.</td>
</tr>
<tr>
<td>Color</td>
<td>white-yellow or white-grey</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>5 - 7 (1 %)</td>
</tr>
<tr>
<td>Melting point</td>
<td>149 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt; 0.001 hPa (20 °C)</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>323.13 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Poorly soluble in water. Soluble in ethanol.</td>
</tr>
<tr>
<td></td>
<td>Soluble in acetone. Soluble in chloroform.</td>
</tr>
<tr>
<td></td>
<td>Soluble in propyleneglycol. Soluble in methanol.</td>
</tr>
<tr>
<td></td>
<td>Soluble in ethylacetate.</td>
</tr>
<tr>
<td></td>
<td>Water: 0.25 g/100ml</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC content</td>
<td>0 %</td>
</tr>
<tr>
<td>Other properties</td>
<td>Neutral reaction.</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
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Skin corrosion/irritation: Not classified
   pH: 5 - 7 (1 %)

Serious eye damage/irritation: Not classified
   pH: 5 - 7 (1 %)

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: May cause cancer.

**chloramphenicol (56-75-7)**
National Toxicology Program (NTP) Status: Reasonably anticipated to be Human Carcinogen

**chloramphenicol (56-75-7)**
Reproductive toxicity: Not classified

Specific target organ toxicity – single exposure: Not classified

Specific target organ toxicity – repeated exposure: Not classified

Aspiration hazard: Not classified

Viscosity, kinematic: No data available

Symptoms/effects after eye contact: Visual disturbances.


**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.

Ecology - water: Toxic to aquatic organisms. Water pollutant (surface water).

**12.2. Persistence and degradability**

**chloramphenicol (56-75-7)**
Persistence and degradability: Biodegradable in water.

**chloramphenicol (56-75-7)**
Bioaccumulative potential: No bioaccumulation data available.

**12.4. Mobility in soil**
No additional information available

**12.5. Other adverse effects**
No additional information available

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**
Product/Packaging disposal recommendations: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery.


SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT

Other information: No supplementary information available.

Transportation of Dangerous Goods

Transport by sea
Not regulated

Air transport
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

chloramphenicol (56-75-7)
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

National regulations

chloramphenicol (56-75-7)
Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

<table>
<thead>
<tr>
<th>Component</th>
<th>State or local regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>chloramphenicol(56-75-7)</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 16: Other information

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Revision date: 05/11/2017
Full text of H-phrases:

| H350 | May cause cancer |

SDS US (GHS HazCom 2012)

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.