## Kit Components

<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C9451</td>
<td>Coumermycin A1, 5mg</td>
</tr>
</tbody>
</table>

Components:

| C945 | Coumermycin |
1 Identification

Product identifier

Trade name: Coumermycin

Article number: C945
CAS Number: 4434-05-3

Application of the substance / the mixture Laboratory chemicals

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department: SDS author: Regulatory.Affairs@promega.com

Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture

GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H332 Harmful if inhaled.
Eye Irrit. 2A H319 Causes serious eye irritation.

Label elements

GHS label elements
The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms GHS07

Signal word Warning

Hazard-determining components of labeling:
Coumermycin A-1

Hazard statements
Harmful if swallowed or if inhaled.
Causes serious eye irritation.

Precautionary statements
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid breathing dust/fume/gas/mist/vapors/spray

(Contd. on page 2)
Trade name: Coumermycin

Wear eye protection / face protection.
Use only outdoors or in a well-ventilated area.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
NFPA ratings (scale 0 - 4)
Health = 3
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 2
Fire = 0
Reactivity = 0
OSHA Hazard Overview (Criteria according to 29 CFR 1910.1200):
Highly Toxic
Irritant
Primary route(s) of entry:
Dermal
Inhalation
Oral
Target Organ(s): Not applicable or unknown

Other hazards
This mixture has not been tested to determine the overall health hazard; therefore in accordance with 29 CFR 1910.1200, the data reported above pertains to the hazardous ingredients of this mixture.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances
CAS No. Description
4434-05-3 Coumermycin A-1

4 First-aid measures

Description of first aid measures
General information:
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
Seek medical treatment in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
### 43.0 After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

### 44.0 After swallowing:
Seek immediate medical advice.

### 45.0 Information for doctor:
- **Most important symptoms and effects, both acute and delayed**: None
- **Indication of any immediate medical attention and special treatment needed**: No further relevant information available.

### 5 Fire-fighting measures

**Extinguishing media**
- Suitable extinguishing agents:
  - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture: None known
- Advice for firefighters: No special advice
- Protective equipment: Mouth respiratory protective device.

### 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
- Remove persons from danger area.
- Avoid formation of dust.
- Wear protective clothing.
- Environmental precautions: Do not allow to enter sewers/surface or ground water.

**Methods and material for containment and cleaning up:**
- Dispose contaminated material as waste according to Section 13.
- Pick up mechanically.
- Ensure adequate ventilation.

**Reference to other sections**
- See Section 7 for information on safe handling.
- See Section 13 for disposal information.

### 7 Handling and storage

**Handling:**
- Precautions for safe handling
  - Thorough dedusting.
  - Keep receptacles tightly sealed.
  - Ensure good ventilation/exhaustion at the workplace.

**Information about protection against explosions and fires:** The product is not flammable.

**Conditions for safe storage, including any incompatibilities**

**Storage:**
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Specific end use(s): No further relevant information available.
8 Exposure controls/personal protection

Control parameters
Components with limit values that require monitoring at the workplace: Not required.
Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Do not eat or drink while working.
Clean skin thoroughly immediately after handling the product.

Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:
Protective gloves
Select the glove material considering penetration time, rate of diffusion and degradation time.
It is recommended that the selected protective gloves be tested and approved under NIOSH or EU Directive 89/686/EEC and the standard EN 374 derived from it.

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Eye protection:
Safety glasses
Use equipment for eye protection tested and approved under government NIOSH standards.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
Form: Solid
Color: Yellow tint
Odor: Not determined
Odor threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/Melting range: 259 °C (498 °F)
Boiling point/Boiling range: Undetermined.
Flash point: Not applicable.

Flammability (solid, gaseous): Product is not flammable.

Ignition temperature:
Decomposition temperature: Not determined.

Auto igniting: Not determined.
**Trade name:** Coumermycin

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**
- Lower: Not determined.
- Upper: Not determined.
- Vapor pressure: Not applicable.

**Density:** Not determined.

**Relative density**

**Vapor density**

**Evaporation rate:** Not applicable.

**Solubility in / Miscibility with Water:** Insoluble.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**
- Dynamic: Not applicable.
- Kinematic: Not applicable.

**Organic solvents:** 0.0 %

**Solids content:** 100.0 %

**Other information**

No further relevant information available.

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**10 Stability and reactivity**

**Reactivity:** No further relevant information available.

**Chemical stability**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions**

**Conditions to avoid**

**Incompatible materials:**

**Hazardous decomposition products:** No dangerous decomposition products known.

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**11 Toxicological information**

**Information on toxicological effects**

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

**4434-05-3 Coumermycin A-1**

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>2000 mg/kg (Mouse)</td>
</tr>
<tr>
<td>Dermal</td>
<td>LD50</td>
<td>250 mg/kg (Mouse)</td>
</tr>
</tbody>
</table>

**Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

**Carcinogenic categories**

**IARC (International Agency for Research on Cancer)**

Substance is not listed.

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Trade name: Coumermycin

12 Ecological information

Toxicity
Aquatic toxicity: Not harmful to the aquatic environment
Persistence and degradability: Not available
Behavior in environmental systems:
Bioaccumulative potential: Not known
Mobility in soil: No further relevant information available.
Ecotoxicological effects:
Remark: Not available
Additional ecological information:
General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

14 Transport information

| UN-Number | Not hazardous for transportation |
| DOT, ADR, ADN, IMDG, IATA | Void |
| UN proper shipping name | Void |
| DOT, ADR, ADN, IMDG, IATA | Void |
| Transport hazard class(es) | Void |
| DOT, ADR, ADN, IMDG, IATA | Void |
| Packing group | Void |
Trade name: Coumermycin

<table>
<thead>
<tr>
<th>Environmental hazards:</th>
<th>Marine pollutant: No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special precautions for user</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>UN &quot;Model Regulation&quot;:</td>
<td>Void</td>
</tr>
</tbody>
</table>

## 15 Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

**Sara**

- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is not listed.
- **Proposition 65**
  - **Chemicals known to cause cancer:** Substance is not listed.
  - **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
  - **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
  - **Chemicals known to cause developmental toxicity:** Substance is not listed.

### Cancerogenity categories

- **EPA (Environmental Protection Agency)**
  - Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)**
  - Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - Substance is not listed.

### GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Signal word** Warning

- **Hazard-determining components of labeling:** Coumermycin A-1

### Hazard statements

- Harmful if swallowed or if inhaled.
- Causes serious eye irritation.

### Precautionary statements

- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear eye protection / face protection.
Use only outdoors or in a well-ventilated area.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If eye irritation persists: Get medical advice/attention.
Rinse mouth.
Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Environmental Health and Safety Department
2800 Woods Hollow Road
Madison, WI
Ph: (608) 274-4330

Date of preparation / last revision: 07/04/2016 /

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: Internation Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

* Data compared to the previous version altered.