# MucuSol Botanical
## Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 01/14/2020  Version: 1.1

<table>
<thead>
<tr>
<th>SECTION 1: Identification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1. Identification</strong></td>
<td></td>
</tr>
<tr>
<td>Product form:</td>
<td>Mixture</td>
</tr>
<tr>
<td>Product name:</td>
<td>MucuSol Botanical</td>
</tr>
</tbody>
</table>

| **1.2. Recommended use and restrictions on use** |  |
| Use of the substance/mixture:               | Liquid Expectorant for Poultry and Swine |

| **1.3. Supplier** |  |
| Animal Science Products, Inc. |
| 3418 Rayburn Drive |
| Nacogdoches, TX 75961 |
| Phone: 936.560.0003 |

| **1.4. Emergency telephone number** |  |
| Emergency number:                   | 24 Hour Contact - Infotrac |
| Domestic contact:                    | 800-535-5053 |
| International contact:               | +1-352-323-3500 |

| SECTION 2: Hazard(s) identification |  |
| **2.1. Classification of the substance or mixture** |  |
| **GHS-US classification** |  |
| Skin corrosion/irritation Category 2: | H315 - Causes skin irritation |
| Serious eye damage/eye irritation Category 2: | H319 - Causes serious eye irritation |
| Skin sensitization Category 1: | H317 - May cause an allergic skin reaction |
| Full text of H statements: see section 16 |

| **2.2. GHS Label elements, including precautionary statements** |  |
| **GHS-US labeling** |  |
| Hazard pictograms (GHS-US): | ![Warning]

| Signal word (GHS-US): | Warning |
| Hazard statements (GHS-US): | H315 - Causes skin irritation, H317 - May cause an allergic skin reaction, H319 - Causes serious eye irritation |
| Precautionary statements (GHS-US): | P261 - Avoid breathing mist/vapors, P264 - Wash hands and other exposed areas thoroughly after handling, P272 - Contaminated work clothing must not be allowed out of the workplace, P280 - Wear protective gloves/protective clothing/eye protection/face protection, P302+P352 - If on skin: Wash with plenty of water, P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, P333+P313 - If skin irritation or rash occurs: Get medical advice/attention, P337+P313 - If eye irritation persists: Get medical advice/attention, P362+P364 - Take off contaminated clothing and wash it before reuse, P501 - Dispose of contents/container in accordance with local, state and federal regulations |

| **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** |  |
| Not applicable – the product is a mixture |
3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Propanediol, 3-(2-methoxyphenoxy)-</td>
<td>(CAS No) 93-14-1</td>
<td>12.8</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H335</td>
</tr>
<tr>
<td>Oils, peppermint</td>
<td>(CAS No) 8006-90-4</td>
<td>1</td>
<td>Flam. Liq. 4, H227</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1, H317</td>
</tr>
<tr>
<td>Eucalyptus globulus globulus, extract</td>
<td>(CAS No) 97926-40-4</td>
<td>1</td>
<td>Flam. Liq. 3, H226</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1B, H317</td>
</tr>
</tbody>
</table>

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

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Potential Adverse human health effects and symptoms : No additional information available.

Symptoms/injuries after inhalation : May cause an allergic skin reaction.

Symptoms/injuries after skin contact : Causes skin irritation.

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

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


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

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.
### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing mist/vapors.

Hygiene measures: Wash hands and other exposed areas thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Incompatible products: None known.

Incompatible materials: None known.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| 1,2-Propanediol, 3-(2-methoxyphenoxy)- (93-14-1) | Not applicable |
| Eucalyptus globulus globulus, extract (97926-40-4) | Not applicable |
| Oils, peppermint (8006-90-4) | Not applicable |

### 8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses and full face shield.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Not typically required.

Other information: Do not eat, drink or smoke during use.

## 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>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Green</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</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>2.3 kPa</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.04</td>
</tr>
<tr>
<td>Relative gas density</td>
<td>0.62</td>
</tr>
</tbody>
</table>
MucuSol Botanical
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility : No data available
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

1,2-Propanediol, 3-(2-methoxyphenoxy)-(93-14-1)
LD50 oral rat : 1510 mg/kg
ATE US (oral) : 1510 mg/kg body weight

Oils, peppermint (8006-90-4)
LD50 oral rat : 2426 mg/kg
ATE US (oral) : 2426 mg/kg body weight

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified
Specific target organ toxicity – repeated exposure : Not classified
Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms : No additional information available.
Symptoms/injuries after inhalation : May cause an allergic skin reaction.
Symptoms/injuries after skin contact : Causes skin irritation.
SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability

| MucuSol Botanical | Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| MucuSol Botanical | Bioaccumulative potential | Not established. |

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local, state and federal regulations.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated for transport

TDG
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>MucuSol Botanical</th>
<th>Skin corrosion or irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Serious eye damage or irritation</td>
</tr>
<tr>
<td></td>
<td>Respiratory or skin sensitization</td>
</tr>
</tbody>
</table>

1,2-Propanediol, 3-(2-methoxyphenoxy)- (93-14-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Oils, peppermint (8006-90-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

<table>
<thead>
<tr>
<th>1,2-Propanediol, 3-(2-methoxyphenoxy)- (93-14-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>
MucuSol Botanical
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Oils, peppermint (8006-90-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

EU-Regulations

<table>
<thead>
<tr>
<th>1,2-Propanediol, 3-(2-methoxyphenoxy)- (93-14-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eucalyptus globulus globulus, extract (97926-40-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>

National regulations

<table>
<thead>
<tr>
<th>1,2-Propanediol, 3-(2-methoxyphenoxy)- (93-14-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
</tr>
<tr>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
</tr>
<tr>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
<tr>
<td>Listed on INSQ (Mexican national Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on Turkish inventory of chemical</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oils, peppermint (8006-90-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
</tr>
<tr>
<td>Listed on the Japanese ISHL (Industrial Safety and Health Law)</td>
</tr>
<tr>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
</tr>
<tr>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
<tr>
<td>Listed on INSQ (Mexican national Inventory of Chemical Substances)</td>
</tr>
<tr>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H226</th>
<th>Flammable liquid and vapor</th>
</tr>
</thead>
<tbody>
<tr>
<td>H227</td>
<td>Combustible liquid</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

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.