SECTION 1: Identification

1.1. Identification
Product form : Mixtures
Product name : Poly(furfuryl alcohol)
Product code : 15794
Synonyms : 2-Furanmethanol, homopolymer

1.2. Recommended use and restrictions on use
Recommended use : Manufacture of substances, Scientific research and development, Use as laboratory reagent

1.3. Supplier
Supplier
Polysciences Inc
400 Valley Road
Warrington, PA 18976 - United States
T (215)-343-6484 - F (215)-343-0214
info@polysciences.com - www.polysciences.com

1.4. Emergency telephone number
Emergency number : (215)-378-4526

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Acute toxicity (oral), Category 4
Acute toxicity (inhal.), Category 4
Carcinogenicity, Category 2
Specific target organ toxicity — Repeated exposure, Category 2

2.2. GHS Label elements, including precautionary statements
GHS-US labelling
Hazard pictograms (GHS-US) : 

- GHS07
- GHS08

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : Harmful if swallowed or if inhaled
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure
Precautionary statements (GHS-US) : Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Do not breathe fume, mist, vapours, spray
Avoid breathing dust/fume/gas/mist/vapours/spray
Wash hands, forearms and face thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
If swallowed: rinse mouth. Do NOT induce vomiting
If swallowed: Call a poison center/doctor/… if you feel unwell
If inhaled: Remove person to fresh air and keep comfortable for breathing
If exposed or concerned: Get medical advice/attention
Get medical advice/attention if you feel unwell
Store locked up
Poly(furfuryl alcohol)
Safety Data Sheet

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
Not applicable

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>2-Furanmethanol, homopolymer</td>
<td>(CAS-No.) 25212-86-6</td>
<td>90 - 95</td>
<td>Not classified</td>
</tr>
<tr>
<td>furfuryl alcohol</td>
<td>(CAS-No.) 98-00-0</td>
<td>5 - 10</td>
<td>Flam. Liq. 4, H227, Acute Tox. 3 (Oral), H301, Acute Tox. 3 (Dermal), H311, Acute Tox. 3 (Inhalation), H331, Eye Irrit. 2, H319, Carc. 2, H351, STOT SE 3, H335, STOT RE 2, H373</td>
</tr>
</tbody>
</table>

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general
IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation
Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water.

First-aid measures after eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. Rinse eyes with water as a precaution.

First-aid measures after ingestion
Rinse mouth out with water. Do not induce vomiting. Give nothing or a little water to drink. Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)
No additional information available

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
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray.
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".
Emergency procedures: Do not touch spilled material. Ventilate area. Keep away from combustible material.

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.
Hygiene measures: 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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH TWA (ppm)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>OSHA PEL (TWA) (ppm)</th>
<th>IDLH (ppm)</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
<th>NIOSH REL (TWA) (ppm)</th>
<th>NIOSH REL (STEL) (mg/m³)</th>
<th>NIOSH REL (STEL) (ppm)</th>
<th>US-NIOSH chemical category</th>
</tr>
</thead>
<tbody>
<tr>
<td>furfuryl alcohol (98-00-0)</td>
<td>0.2 ppm</td>
<td>200 mg/m³</td>
<td>50 ppm</td>
<td>75 ppm</td>
<td>40 mg/m³</td>
<td>10 ppm</td>
<td>60 mg/m³</td>
<td>15 ppm</td>
<td>Potential for dermal absorption</td>
</tr>
<tr>
<td>2-Furanmethanol, homopolymer (25212-86-6)</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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: Protective gloves
Eye protection: Safety glasses
Skin and body protection: Wear suitable protective clothing
**Poly(furfuryl alcohol)**

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Respiratory protection:**

Wear respiratory protection

---

### 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>Colour</td>
<td>Mixture contains one or more component(s) which have the following colour(s): clear red brown</td>
</tr>
<tr>
<td>Odour</td>
<td>There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): burning</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</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>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No additional information available

---

### 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

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

---

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects
Acute toxicity: Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.

<table>
<thead>
<tr>
<th>Poly(furfuryl alcohol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
</tr>
<tr>
<td>ATE US (gases)</td>
</tr>
<tr>
<td>ATE US (vapours)</td>
</tr>
<tr>
<td>ATE US (dust,mist)</td>
</tr>
</tbody>
</table>

furfuryl alcohol (98-00-0)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>110 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>657 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>233 ppm/4h</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>110.000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>657.000 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE US (gases)</td>
<td>233.000 ppmv/4h</td>
</tr>
<tr>
<td>ATE US (vapours)</td>
<td>3.000 mg/l/4h</td>
</tr>
<tr>
<td>ATE US (dust,mist)</td>
<td>0.500 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Suspected of causing cancer.

National Toxicity Program (NTP) Status: 1 - Evidence of Carcinogenicity
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: Not classified

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

furfuryl alcohol (98-00-0)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>32 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming: No known effects from this product.
GWPmix comment: No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods
Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport information

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

Transportation of Dangerous Goods
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>furfuryl alcohol (98-00-0)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>2-Furanmethanol, homopolymer (25212-86-6)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

15.2. International regulations

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>furfuryl alcohol (98-00-0)</td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
<tr>
<td>2-Furanmethanol, homopolymer (25212-86-6)</td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>

15.3. US State regulations

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>furfuryl alcohol (98-00-0)</td>
<td>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 significance risk level (NSRL)</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

| furfuryl alcohol (98-00-0) | 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 |

SECTION 16: Other information

Revision date : 07/06/2017

SDS US Polysciences

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.