 SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier 34058 / Glutethimide Standard

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

Recommended Uses For Laboratory use only
Uses advised against Uses other than recommended use.

1.3. Details of the supplier of the safety data sheet

Manufacturer Supplier
Restek Corporation Thames Restek UK LTD
110 Benner Circle Units 8-16, Ministry Wharf
Bellefonte, Pa. 16823 Wycombe Road, Saunderton
USA Buckinghamshire
00 1 814-353-1300 United Kingdom HP14 4HW
00 1 814-353-1309 01494 563377
sds@restek.com sales@thamesrestek.co.uk

1.4. Emergency telephone number

00 1 800-424-9300 0870-8200418
(CHEMTREC within the US) (CHEMTREC within the UK)
00 1 703-741-5970 +1 703-741-5970
(Outside USA) (CHEMTREC International)

 SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1
Flammable Liquid Category 2
Acute Toxicity - Inhalation Dust / Mist Category 3
Acute Toxicity - Dermal Category 3
Acute Toxicity - Oral Category 3

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

GHS Hazard Symbols

Signal Word Danger

Hazard Statements H225 - Highly flammable liquid and vapour.
H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
H370 - Causes damage to organs.

Precautionary Statements

Prevention P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/…
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Supplemental Hazard information (EU)

2.3. Other hazards

Does the substance or mixture meet the criteria for PBT or vPvB in accordance with Annex XIII (or handled as if they were PBT/vPvB)

Water Hazard Class

ID Number 145, hazard class 1 - low hazard to waters
ID Number 145, hazard class 2 - hazard to waters

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>%</th>
<th>CAS #</th>
<th>(EC) No 1272/2008</th>
<th>M-Factor as found in Annex VI</th>
<th>SCL as found in Annex VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>methanol</td>
<td>99.900000</td>
<td>67-56-1</td>
<td>Acute Tox. 3 (Dermal); H311 Acute Tox. 3 (Inh Dust/Mist); H331 Acute Tox. 3 (Oral); H301 Flam. Liq. 2; H225 STOT SE 1; H370</td>
<td>No data available.</td>
<td>STOT SE 2: 3%&lt;10% STOT SE 1: 10%</td>
</tr>
</tbody>
</table>

Non hazardous components may be present in this table due to their classification as “non-classified vPvB substance” or “a substance with a Union workplace exposure limit”.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.

Eyes: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS.

4.2. Most important symptoms and effects, both acute and delayed

Symptom: See Section 4.1

4.3. Indication of any immediate medical attention and special treatment needed

Note to Doctor: No additional first aid information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.

Unsuitable extinguishing media: None Known
5.2. Special hazards arising from the substance or mixture

**Fire and/or Explosion Hazards**

Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

**Hazardous Combustion Products**

Carbon dioxide, Carbon monoxide

5.3. Advice for firefighters

**Fire Fighting Methods and Protection**

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

Isolate area. Keep unnecessary personnel away.

Exposure to the spilled material may be severely irritating or toxic.

Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

**For emergency responders**

Isolate area. Keep unnecessary personnel away.

Exposure to the spilled material may be severely irritating or toxic.

Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

6.2. Environmental precautions

No data available.

6.3. Methods and material for containment and cleaning up

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

6.4. Reference to other sections

Refer to Section 8 for personal protective equipment and Section 13 for Disposal Information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition.

7.3. Specific end use(s)

For Laboratory use only

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

**Occupational Exposure limit values:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>EINECS</th>
<th>WEL- STEL</th>
<th>WEL-TWA</th>
<th>Biological Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>methanol</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>250 ppm STEL; 333 mg/m3 STEL</td>
<td>200 ppm TWA; 266 mg/m3 TWA</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**Information on monitoring procedures**

No data available.
8.2. Exposure controls
Appropriate engineering controls
Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing.

Personal protection equipment
Eye/face protection
Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Skin Protection
Hand protection
No information available

Other skin protection
Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Respiratory Protection
Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection.

Respirator Type(s)
None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Thermal hazards
No data available.

Environmental exposure controls
No data available.

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>Appearance</td>
<td>No data available.</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available.</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild</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/freezing point °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range °C</td>
<td>65</td>
</tr>
<tr>
<td>Flash Point °C</td>
<td>11</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Upper Flammabl or Explosive Limit, % in air</td>
<td>36</td>
</tr>
<tr>
<td>Lower Flammable or Explosive Limit, % in air</td>
<td>6</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>1.10</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>1.10</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.8</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Moderate: 50-99%</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available.</td>
</tr>
<tr>
<td>Auto-ignition Temperature °C</td>
<td>464</td>
</tr>
<tr>
<td>Decomposition Temperature °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available.</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
Volatiles, % by weight
0
Volatile Organic Chemicals
0
Bulk Density
6.676

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Strong oxidizing agents
10.4. Conditions to avoid  No data available.
10.5. Incompatible materials  Strong oxidizing agents
10.6. Hazardous decomposition products  Carbon dioxide Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>INHALATION LC50-8H Rat 22500 ppm</td>
</tr>
</tbody>
</table>

Classification has been based on toxicological information of the components in Section 3.

Skin corrosion/irritation  
Based on available data, the classification criteria are not met.

Serious eye damage/irritation  
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation  
Based on available data, the classification criteria are not met.

Germ cell mutagenicity  
Based on available data, the classification criteria are not met.

Carcinogenicity  
Based on available data, the classification criteria are not met.

Reproductive toxicity  
Based on available data, the classification criteria are not met.

STOT-single exposure  
Classification has been based on toxicological information of the components in Section 3.

STOT-repeated exposure  
Based on available data, the classification criteria are not met.

Aspiration hazard  
Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity  
Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.

12.2. Persistence and degradability  
Biodegrades slowly.

12.3. Bioaccumulative potential  
No data available.

12.4. Mobility in soil  
No data

12.5. Results of PBT and vPvB assessment  
No data available.

12.6. Other adverse effects  
No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods  
Spent or discarded material is a hazardous waste. Dispose of by incineration following Federal, State, Local, or Provincial regulations.
**Glutethimide Standard**

**IATA - UN number**
UN1230

**14.2. UN proper shipping name**

<table>
<thead>
<tr>
<th>ADR – Shipping Name</th>
<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA – Shipping Name</td>
<td>Methanol</td>
</tr>
</tbody>
</table>

**14.3. Transport hazard class(es)**

<table>
<thead>
<tr>
<th>ADR – Hazard Class</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA – Hazard Class</td>
<td>3(6.1)</td>
</tr>
</tbody>
</table>

**14.4. Packing group**

<table>
<thead>
<tr>
<th>ADR – Packing Group</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA – Packing Group</td>
<td>II</td>
</tr>
</tbody>
</table>

**14.5. Environmental hazards**

<table>
<thead>
<tr>
<th>Marine Pollutant</th>
<th>No</th>
</tr>
</thead>
</table>

**14.6. Special precautions for user**

No data available.

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

No data available.

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Commission Regulation (EU) 2015/830

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EINECS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EINECS Number if Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>200-659-6</td>
</tr>
</tbody>
</table>

**SVHC - Substance of Very High Concern**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Data listed on SVHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**SECTION 16: Other information**

**Revision Date:** 09/01/2017

**Indication of changes:** Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.

**Abbreviations and acronyms:** No data available.

**References:** No data available.

**List of relevant hazard statements and/or precautionary statements used in Section 2 & 3:**

**Precautionary Statements**

<table>
<thead>
<tr>
<th>Prevention</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>P210</td>
<td>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</td>
</tr>
<tr>
<td>P240</td>
<td>Ground/bond container and receiving equipment.</td>
</tr>
<tr>
<td>P241</td>
<td>Use explosion-proof electrical/ventilation and lighting equipment.</td>
</tr>
<tr>
<td>P242</td>
<td>Use only non-sparking tools.</td>
</tr>
<tr>
<td>P243</td>
<td>Take precautionary measures against static discharge.</td>
</tr>
<tr>
<td>P260</td>
<td>Do not breathe dust/fume/gas/mist/vapours/spray.</td>
</tr>
<tr>
<td>P261</td>
<td>Avoid breathing dust/fume/gas/mist/vapours/spray.</td>
</tr>
<tr>
<td>P264</td>
<td>Wash hands and skin thoroughly after handling.</td>
</tr>
<tr>
<td>P270</td>
<td>Do not eat, drink or smoke when using this product.</td>
</tr>
<tr>
<td>P271</td>
<td>Use only outdoors or in a well-ventilated area.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>P301+P310</td>
<td>IF SWALLOWED: Immediately call a POISON CENTER/doctor/…</td>
</tr>
</tbody>
</table>
P302+P352 - IF ON SKIN: Wash with plenty of water/...
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Call a POISON CENTER/doctor.
P311 - Call a POISON CENTER/doctor/...
P312 - Call a POISON CENTER/doctor/... if you feel unwell.
P321 - Specific treatment see section 4.
P330 - Rinse mouth.
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use extinguishing media in section 5 to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.

Storage

Disposal

P501 - Dispose of contents/container according to section 13 of the SDS.

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