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

**1.1. Product identifier**
- **Product name**: GAS TREATMENT
- **Product code**: 7246

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
- **Use**: OCTANE TREATMENT.

**1.3. Details of the supplier of the safety data sheet**
The Penray Companies, Inc.
440 Denniston Ct.
Wheeling, IL 60090
T (800) 373-6729
riotto@penray.com

**1.4. Emergency telephone number**
- **Emergency number**: (800) 373-6729
- CHEMTREC (800) 424-9300
- CHEMTREC International +1 (703) 527-3887 24 hr

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**GHS-US classification**
- Flammable Liquid 2
- Acute toxicity 3 (Oral, Dermal, Inhalation)
- Eye irritation 2A

**2.2. Label elements**

**GHS-US labelling**
- **Hazard pictograms (GHS-US)**: 
  - GHS02
  - GHS06
  - GHS07
  - GHS08

- **Signal word (GHS-US)**: Danger
- **Hazard statements (GHS-US)**: Highly flammable liquid and vapor. Toxic if swallowed, in contact with skin or if inhaled. Causes serious eye irritation. Causes damage to eyes.
- **Precautionary statements (GHS-US)**: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If exposed: Call a poison center/doctor. If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a poison center/doctor if you feel unwell If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

**2.3. Other hazards**

No additional information available
<table>
<thead>
<tr>
<th>3.1.</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
GAS TREATMENT
Safety Data Sheet

### 3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
</table>
| Methanol              | (CAS No) 67-56-1   | 60 - 100 | Flam. Liq. 2  
Acute Tox. 3 (Oral, Dermal, Inhalation)  
Eye Irrit. 2B  
STOT SE 1 |
| Isopropyl alcohol     | (CAS No) 67-63-0   | 1 - 5  | Flam. Liq. 2  
Eye Irrit. 2A  
STOT SE 3 |

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

* **First-aid measures after inhalation**: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention.

* **First-aid measures after skin contact**: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical advice/attention if you feel unwell.

* **First-aid measures after eye contact**: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.

* **First-aid measures after ingestion**: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Get immediate medical advice/attention.

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

* **Symptoms/injuries after inhalation**: Toxic if inhaled. May cause respiratory tract irritation. Vapors may cause narcosis with headache, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death.

* **Symptoms/injuries after skin contact**: Toxic in contact with skin. May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Other symptoms are similar to those experienced through inhalation and ingestion.

* **Symptoms/injuries after eye contact**: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

* **Symptoms/injuries after ingestion**: Toxic if swallowed. May be fatal or cause blindness if swallowed. May cause stomach distress, nausea or vomiting. Ingestion may cause headache, dizziness, drowsiness, metabolic acidosis, coma, seizures.

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

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

* **Suitable extinguishing media**: Powder, water spray, foam, carbon dioxide.

* **Unsuitable extinguishing media**: None known.

#### 5.2. Special hazards arising from the substance or mixture

* **Fire hazard**: Products of combustion may include, and are not limited to: oxides of carbon, formaldehyde.

#### 5.3. Advice for firefighters

* **Firefighting instructions**: Burns with a colourless invisible flame. In case of fire and/or explosion do not breathe fumes.

* **Protection during firefighting**: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

* **General measures**: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

#### 6.2. Methods and material for containment and cleaning up

* **For containment**: Dike and contain spill. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

* **Methods for cleaning up**: Scoop up material and place in a disposal container. Provide ventilation.

#### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

09/03/2014  EN (English)  3/7
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. Use only non-sparking tools. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities


7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Compound</th>
<th>USA ACGIH</th>
<th>USA ACGIH</th>
<th>USA OSHA</th>
<th>USA OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol (67-56-1)</td>
<td>ACGIH TWA (ppm)</td>
<td>200 ppm</td>
<td>ACGIH STEL (ppm)</td>
<td>250 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>260 mg/m³</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Isopropyl alcohol (67-63-0)</td>
<td>ACGIH TWA (ppm)</td>
<td>200 ppm</td>
<td>ACGIH STEL (ppm)</td>
<td>400 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>980 mg/m³</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>400 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection: Neoprene or nitrile rubber gloves.

Eye protection: Wear approved eye (properly fitted dust- or splash-proof chemical safety goggles) / face (face shield) protection.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

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>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Solvent</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>Relative evaporation rate (butylacetate=1)</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>64 - 65 °C (147 - 149 °F) @ 101.32 kPa (Methanol)</td>
</tr>
<tr>
<td>Flash point</td>
<td>11 - 12 °C (52 - 54 °F) (Methanol)</td>
</tr>
</tbody>
</table>
GAS TREATMENT
Safety Data Sheet

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<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>Flammability (solid, gas)</td>
<td>Flammable</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>0.785 - 0.805</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>Log Kow</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 properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</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
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under normal storage conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Heat. Incompatible materials.

10.5. Incompatible materials

10.6. Hazardous decomposition products
May include, and are not limited to: oxides of carbon, formaldehyde.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Toxic if swallowed, in contact with skin or if inhaled.

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 oral (mg/kg)</th>
<th>LD50 dermal (mg/kg)</th>
<th>LC50 inhalation (mg/l/4h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>methanol (67-56-1)</td>
<td>&gt; 50 but ≤ 300</td>
<td>&gt; 200 but ≤ 1000</td>
<td>&gt; 2.0 but ≤ 10.0</td>
</tr>
<tr>
<td>isopropyl alcohol (67-63-0)</td>
<td>5628 mg/kg</td>
<td>15800 mg/kg</td>
<td>83.2 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Causes serious eye irritation.
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.
Isopropyl alcohol (67-63-0)

| IARC group | 3 - Not classifiable |

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

Specific target organ toxicity (single exposure): Causes damage to eyes. Inhalation, ingestion or skin absorption of methanol can cause significant disturbances in vision, including blindness.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

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

Symptoms/injuries after inhalation: Toxic if inhaled. May cause respiratory tract irritation. Vapors may cause narcosis with headache, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death.

Symptoms/injuries after skin contact: Toxic in contact with skin. May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Other symptoms are similar to those experienced through inhalation and ingestion.

Symptoms/injuries after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion: Toxic if swallowed. May be fatal or cause blindness if swallowed. May cause stomach distress, nausea or vomiting. Ingestion may cause headache, dizziness, drowsiness, metabolic acidosis, coma, seizures.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability
7246
Persistence and degradability: Not established.

12.3. Bioaccumulative potential
7246
Bioaccumulative potential: Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on ozone layer: No additional information available

Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information: Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number
UN-No.: UN1992

14.2. UN proper shipping name
Proper Shipping Name: Flammable liquids, toxic, n.o.s. (Methanol, Isopropanol)

Department of Transportation Hazard Classes: 3 (6.1)

Hazard labels: 

Packing group: II
14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

**Methanol (67-56-1)**

<table>
<thead>
<tr>
<th>Listed on United States SARA Section 313</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 313 - Emission Reporting</td>
<td>1.0 %</td>
</tr>
</tbody>
</table>

**Isopropyl alcohol (67-63-0)**

<table>
<thead>
<tr>
<th>Listed on United States SARA Section 313</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA TSCA Regulatory Flag</td>
<td>T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.</td>
</tr>
<tr>
<td>SARA Section 313 - Emission Reporting</td>
<td>1.0 %</td>
</tr>
</tbody>
</table>

15.3. US State regulations

**7246**

| State or local regulations | This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. |

SECTION 16: Other information

| Indication of changes | None. |
| Date of issue | 09/03/2014 |
| Other information | None. |

**NFPA health hazard** : 2

**NFPA fire hazard** : 3

**NFPA reactivity** : 0

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