Mass Air Flow Sensor Cleaner
according to the Hazardous Products Regulation (February 11, 2015)
Date of issue: 02/24/2017  Revision date: 02/24/2017  Version: 1.0

SECTION 1: Identification

1.1. Product identifier
Product form: Mixtures
Product name: Mass Air Flow Sensor Cleaner
Product code: PM7164C

1.2. Recommended use and restrictions on use
Recommended use: Brake Cleaner.

1.3. Supplier
Manufacturer: The Penray Companies, Inc.
440 Denniston Ct.
60090 Wheeling, IL
T (800) 373-6729
rotto@penray.com

Distributor: Aftermarket Auto Parts Alliance, Inc.
2706 Treble Creek, San Antonio, TX 78258
8001 Keele St. Concord, ON L4K 1Y8, Canada
Ph. 210.492.4868  www.alliance1.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: Hazard identification

2.1. Classification of the substance or mixture
Classification (GHS-CA)
Flam. Aerosol 1  H222
Press. Gas (Comp.)  H280
Skin Irrit. 2  H315
Repr. 2  H361
STOT SE 3  H336
STOT RE 2  H373
Asp. Tox. 1  H304

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

- GHS02
- GHS04
- GHS07
- GHS08

Signal word (GHS-CA): Danger

Hazard statements (GHS-CA)
- H222 - Extremely flammable aerosol
- H280 - Contains gas under pressure; may explode if heated
- H315 - Causes skin irritation
- H361 - Suspected of damaging fertility or the unborn child
- H336 - May cause drowsiness or dizziness
- H373 - May cause damage to organs through prolonged or repeated exposure
- H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS-CA)
- P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P211 - Do not spray on an open flame or other ignition source
- P251 - Do not pierce or burn, even after use
- P250 - Do not breathe dust, fume, gas, mist, spray, vapours
- P264 - Wash hands thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P280 - Wear eye protection, face protection, protective clothing, protective gloves
- P308+P313 - IF exposed or concerned: Get medical advice/attention
- P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
- P331 - Do NOT induce vomiting
P302+P352 - IF ON SKIN: Wash with plenty of water
P362+P364 - Take off contaminated clothing and wash it before reuse
P332+P313 - If skin irritation occurs: Get medical advice/attention
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P405 - Store locked up
P410+P403 - Protect from sunlight. Store in a well-ventilated place
P412 - Do not expose to temperatures exceeding 50 °C/ 122 °F
P501 - 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
No additional information available

2.4. Unknown acute toxicity (GHS-CA)
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>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane</td>
<td>(CAS No) 142-82-5</td>
<td>43.30</td>
</tr>
</tbody>
</table>

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

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. Call a physician if irritation develops and persists.

First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

First-aid measures after ingestion: IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries after inhalation: May cause drowsiness or dizziness. Intentional misuse of product by inhalation can result in asphyxiation or death.

Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/injuries after ingestion: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment: 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: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Unsuitable extinguishing media

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

5.3. Specific hazards arising from the hazardous product

Fire hazard: Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon.

Explosion hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions: DO NOT fight fire when fire reaches explosives. Evacuate area.
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. Use special care to avoid static electric charges. |

6.2. Methods and materials for containment and cleaning up

| For containment | Eliminate all ignition sources if safe to do so. 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

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| Precautions for safe handling | Keep away from sources of ignition. - No smoking. Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Do not breathe gas/mist/vapors/spray. Do not swallow. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Handle and open container with care. |

| Hygiene measures | Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking. |
| Additional hazards when processed | Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use. |

7.2. Conditions for safe storage, including any incompatibilities

| Technical measures | Proper grounding procedures to avoid static electricity should be followed. |
| Storage conditions | Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50 °C/122 °F. Store away from direct sunlight or other heat sources. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>n-Heptane (142-82-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USA - ACGIH</td>
<td>ACGIH TWA (ppm)</td>
</tr>
<tr>
<td>USA - ACGIH</td>
<td>ACGIH STEL (ppm)</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

| Appropriate engineering controls | Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. |
| Environmental exposure controls | Maintain levels below Community environmental protection thresholds. |

8.3. Individual protection measures/Personal protective equipment

Hand protection: Wear chemically resistant protective gloves.

Eye protection: Safety glasses or goggles are recommended when using product.

Skin and body protection: Wear suitable protective clothing

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. 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.

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. Aerosol</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>Relative evaporation rate (ether=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>No data available</td>
</tr>
<tr>
<td>Flash point</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>Flammability (solid, gas)</td>
<td>Extremely flammable aerosol</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure at 50 °C</td>
<td>No data available</td>
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<tr>
<td>Relative density</td>
<td>0.7825 - 0.7855</td>
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<tr>
<td>Solubility</td>
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</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</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

Reactivity: No dangerous reaction known under conditions of normal use.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Hazardous decomposition products: May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral): Not classified.
Acute toxicity (dermal): Not classified.
Acute toxicity (inhalation): Not classified.

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 (mg/kg) or LC50 (mg/L)</th>
<th>Calculated acute toxicity estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM7164 oral rat</td>
<td>&gt; 2000</td>
<td>Calculated acute toxicity estimate</td>
</tr>
<tr>
<td>PM7164 dermal rabbit</td>
<td>&gt; 2000</td>
<td>Calculated acute toxicity estimate</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>&gt; 5</td>
<td>Calculated acute toxicity estimate</td>
</tr>
</tbody>
</table>

n-Heptane (142-82-5)

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 (mg/kg)</th>
<th>LC50 (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM7164 dermal rabbit</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>103</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Not classified.
Respiratory or skin sensitization: Not classified.
Germ cell mutagenicity: Not classified.
Carcinogenicity: Not classified.
Reproductive toxicity: Suspected of damaging fertility or the unborn child.
STOT-single exposure : May cause drowsiness or dizziness.
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard : May be fatal if swallowed and enters airways.

**PM7164**

Vaporizer : Aerosol

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

Symptoms/injuries after inhalation : May cause drowsiness or dizziness. Intentional misuse of product by inhalation can result in asphyxiation or death.

Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

### SECTION 12: Ecological information

**12.1. Toxicity**

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

**n-Heptane (142-82-5)**

| LC50 fish 1 | 375 mg/l (Exposure time: 96 h - Species: Cichlid fish) |

**12.2. Persistence and degradability**

**PM7164**

Persistence and degradability : Not established.

**12.3. Bioaccumulative potential**

**PM7164**

Bioaccumulative potential : Not established.

**n-Heptane (142-82-5)**

| Partition coefficient n-octanol/water | 4.66 |

**12.4. Mobility in soil**

**n-Heptane (142-82-5)**

| Partition coefficient n-octanol/water | 4.66 |

**12.5. Other adverse effects**

No additional information available

### SECTION 13: Disposal considerations

**13.1. Disposal methods**

Product/Packaging 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. Pressurized container: Do not pierce or burn, even after use.

### SECTION 14: Transport information

**14.1. Basic shipping description**

In accordance with TDG

**Transportation of Dangerous Goods**

| UN-No. (TDG) | UN1950 |
| TDG Primary Hazard Classes | 2.1 |
| Transport document description | UN1950 AEROSOLS, 2.1 |
| Proper Shipping Name (Transportation of Dangerous Goods) | AEROSOLS |
Hazard labels (TDG): 🟢

14.2. Transport information/DOT
No additional information available

14.3. Air and sea transport
No additional information available

SECTION 15: Regulatory information

15.1. National regulations
All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations
No additional information available

SECTION 16: Other information

Date of issue: 02/24/2017
Revision date: 02/24/2017
Other information: None.
Prepared by: Nexreg Compliance Inc.
www.Nexreg.com

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