1.) Identification

Product Name: Hybrid Airbag Inflator Assembly

Chemical Name / Synonym / Trade Name: Inflator Assembly
Pseudonyms/Programs: APH, AHS, SH5, CADH, PH7-120, PH7-90, PH5, PH5.1, CH3, CH5, DH7, DH8, PH8, etc

Manufacturer’s Name: ARC Automotive, Inc.
Address: 1729 Midpark Road Suite 100
Knoxville, TN 37921
ARC Information Phone Number: (865) 583-7801
Email: (competent person) regulatory@arcautomotive.com

Emergency Phone (Chemtrec) Inside USA (800) 424-9300

2.) Hazards Identification

Appearance and Odor: The device is a Steel Cylinder containing pressurized gas and energetic material.

HMIS:
- Health: 0
- Flammability: 0
- Physical Hazard: 2

Personal Protection: Wear protective clothing/eye protection/Hearing protection

Relevant routes of exposure:
- Skin, Eye, Hearing

Inhalation:
None. If device vents/functions, the products of combustion have been demonstrated to comply with ACGIH exposure limits.

Skin contact:
May cause burns if deployed by hand

Eye contact:
Protect eyes from debris

Hearing:
Hearing protection from impact noise, exceeds 85 dBA
**Hazard statement(s)**
H204: Fire or projection hazard
H280: Contains gas under pressure; may explode if heated

**Precautionary statement(s)**
P280: Wear protective gloves/protective clothing/eye protection

<table>
<thead>
<tr>
<th>3.) Composition / Information on Ingredients</th>
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</thead>
<tbody>
<tr>
<td>These articles contain pyrotechnic components: They are hermetically sealed in the safety device, from the environment. Ingredients will not be released under normal conditions of use, or during standard disposal methods. All housing parts are connected to each other. They cannot be opened without destroying the whole entity.</td>
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<thead>
<tr>
<th>4.) First Aid Measures</th>
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</thead>
<tbody>
<tr>
<td><strong>Inhalation:</strong> None</td>
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<tr>
<td><strong>Skin Contact:</strong> Treat for second degree burn, cool burn area</td>
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<tr>
<td><strong>Eye contact:</strong> Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention</td>
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<tr>
<td><strong>Heating:</strong> Avoid repeated exposure</td>
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<thead>
<tr>
<th>5.) Fire-Fighting Measures</th>
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</thead>
<tbody>
<tr>
<td><strong>Special Fire and Explosive Hazards:</strong> N/A</td>
</tr>
<tr>
<td><strong>Extinguishing Media:</strong> Copious amounts of water</td>
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<tr>
<td><strong>Special Fire Fighting Procedures:</strong> Apply water until the fire is extinguished and the device has cooled to a temperature less than 130°C. The device will relieve pressure at relatively low temperatures and is designed to move no more than 2 to 3 meters when pressure is relieved. No special protective equipment required for firefighters.</td>
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<tr>
<td><strong>Hazardous Combustion Products:</strong> N/A</td>
</tr>
<tr>
<td><strong>Conditions Which Cause Ignition:</strong> When the device reaches a temperature in excess of 130 °C, it will release the stored gas. Additional heating will result in burning of the energetic materials. All energetic materials are consumed if the device reaches a temperature in excess of 300°C. If the igniter is stimulated with an electrical current in excess of 1.2 amps, the device will function; result is rapid</td>
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<thead>
<tr>
<th>6.) Accidental Release Measures</th>
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<tbody>
<tr>
<td><strong>Environmental precautions:</strong> None expected</td>
</tr>
<tr>
<td><strong>Clean up &amp; Containment Method:</strong> When inflator is ruptured and gas generant is present, clean up with non-sparking tools. Avoid spark, static electricity, and open flame. Avoid</td>
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</tbody>
</table>
raising dust. Ventilate area. Wash spill site with water after material pick-up is complete.

Unusual Fire & Explosion Hazards: The device (inflator assembly) is a container with compressed gas at up to 7000 psig pressure supplemented by rapidly burning gas generant materials. If the device is exposed to high temperature, the pressure system will release argon/helium gas mixture. Continued heating will cause the propellant to ignite and combustion gases to be released. The combustion gases are non-toxic, and have demonstrated compliance with ACGIH exposure limits.

7.) Handling and Storage

Handling: Avoid spark, ESD, impact, friction and open flame. Do not puncture or crush or drop. Post deployment, the surface of the inflator may have trace amounts of particulate and is usually hot. Residue may be irritating to the skin, eyes and mucous membranes.

Storage: When not in use, devices should be stored in original shipping containers. Store away from high temperatures, open flame, static electricity, and other ignition sources. Store in accordance with federal, state, and local regulations. Recommend storage at ambient temperatures.

8.) Exposure Controls / Personal Protection

Engineering Controls: Do not expose to excessive heat or flame. Do not puncture or crush. Do not expose to electrical current. Do not incinerate.

Permissive Exposure Limits: None established

ACGIH Threshold Limit Values: None established

Personal Protective Equipment: gloves, safety glasses and hearing protection required when deployed for test purposes

9.) Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
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</tbody>
</table>

Appearance and Odor: The device is a Steel Cylinder/Toroid containing pressurized gas and energetic material.

10.) Stability and Reactivity

Stability: Sealed unit is stable when used as designed.

Conditions to Avoid: Sparks, static electricity, open flame, and hot temperatures which can cause functioning of the inflator

Incompatible Materials: None in present form.
11.) Toxicological Information

Relevant routes of exposure: Skin, Eye, Hearing
- Inhalation: None. If device vents/functions, the products of combustion have been demonstrated to comply with ACGIH exposure limits.
- Skin contact: May cause burns if deployed by hand
- Eye contact: Protect eyes from debris
- Hearing: Hearing protection from impact noise, exceeds 85 dBA

Carcinogen Status: None Known

Target Organ and Other Health Effects: None Known

12.) Ecological Information

When used properly, no environmental effects are anticipated.

Persistence and Degradability

Perchlorate Material – Special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate

13.) Disposal Considerations

Information provided is for unused product only

Recommended method of disposal: Dispose in accordance with Federal, State and local regulations

EPA hazardous waste number: Not a RCRA Waste

14.) Transportation Information

SPECIAL HANDLING, STORAGE, AND PACKAGING RECOMMENDATIONS: This SDS is not intended to have all required shipping information. When not used, devices should be stored in original shipping containers. Do not drop or expose to temperatures above 107°C.

Identification number: UN3268
Proper shipping name: Safety Device
Hazard Classification: Class 9
Special Permit: Product Dependent. Available upon request

For further information contact: ARC Automotive, Inc
1729 Midpark Rd.
Knoxville, TN 37921

15.) Regulatory Information

United States Regulatory Information

TSCA 8 (b) Inventory Status: Contains none listed
TSCA 12 (b) Export Notification: None
CERCLAS/Sara: None Listed
California Proposition 65: Could affect California's Perchlorate Contamination Prevention Act 2003 (AB 826)

16.) Other Information

Date prepared: November 27, 2017

DISCLAIMER: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.