1. PRODUCT AND COMPANY IDENTIFICATION

1.1 DESCRIPTION OF THE PRODUCT:
Pyrotechnic automotive safety devices, including Air Bag inflators, Air Bag Modules, Seat-belt Pretensioners, pyromechanical switches or pyromechanical actuators

1.2 USE OF THE PRODUCT:
Safety devices for vehicles

1.3 DESCRIPTION OF THE COMPANY:
TK Holdings Inc, 2500 Takata Drive, Auburn Hills, Michigan, USA, (1-248-373-8040)

1.4 EMERGENCY NUMBER:
General Information: (1-248-373-8040)
Transportation Emergency Numbers (24 hour): Chemtrec
USA: (800) 424-9300 (Emergencies Only)
International: (+1) (703) 527-3887 (Emergencies Only)

2. HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION
Referenced safety devices are classified as Hazardous Material Class 9, according to the UN and USDOT criteria. (Note: While pyrotechnic ingredients contained in the device represent an explosion hazard, the ingredients can only be released by destructive disassembly of the device). The safety devices do not present an explosion hazard when fully assembled.

2.2 OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

- Initiation hazard of an uncontrolled activation of the safety device due to: fire; heat; electrostatic discharge; inductions though electromagnetic radiation; or, excessive mechanical load.
- Burn hazard when there is direct contact with pyrotechnic safety device during activations
- Potential for frostbite injuries due to sudden release of pressure from compressed gas air bag inflators.
- Potential eye and respiratory tract exposure and irritation from safety device combustion products (particles and gases). Combustion product exposure hazards may increase if large numbers of devices are involved such as responding to transport vehicle fires involving factory shipment quantities of devices
- Temporary impact to hearing from high level noise impulse during device activation

2.3 GHS LABEL ELEMENT, INCLUDING PRECAUTIONARY STATEMENT.

- Safety Devices for Vehicles are considered manufactured articles by TK Holdings Inc. and other manufacturers
3. COMPOSITION / INFORMATION ON INGREDIENTS

The pyrotechnic ingredients are hermetically sealed inside of the tamper proof safety devices. The pyrotechnic ingredients in the objects will not be released under normal conditions or use, or during standard disposal methods. To avoid inadvertent exposure to combustion by-products, safety device housings should only be opened during the disposal if a necessary step of the process

4. FIRST-AID MEASURES

In case of medical emergency, follow general first-aid rules, including:

4.1 ROUTE (S) OF ENTRY.

Inhalation and ingestion are the most likely routes of entry into the body. Injection and absorption are less likely to occur, but are possibilities that may exist through various work environments. It is the responsibility of the end user to have a qualified Occupational Health, Safety and Environmental professional evaluate and recommend control measures to safeguard affected employees.

4.2 HUMAN HEALTH EFFECTS AND SYMPTOMS OF OVEREXPOSURE

4.2.1 INHALATION

- Give oxygen if breathing is difficult.
- Seek medical attention if symptoms persist.

4.2.2 SKIN CONTACT

- Rinse affected area with copious amounts of running water for at least fifteen (15 minutes).
- Seek medical attention if burns develop.

4.2.3 EYE CONTACT

- Rinse eyes thoroughly with copious amounts of running water for at least fifteen (15 minutes).
- Take care not to flush contaminated water into unaffected eye.
- Seek medical attention immediately.

4.2.4 INGESTION

- NA

4.2.5 FROSTBITE OR THERMAL BURNS DUE TO EXPOSURE TO RELEASED GASES:

- Keep the affected body part elevated in order to reduce swelling.
- Remove all wet and restrictive clothing and jewelry that may affect blood flow.
- Apply sterile, dry bandages between any affected areas such as fingers
- Seek medical attention immediately.
5. FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:
- Any standard extinguishing medium including water, sand, and dry chemical.

5.2 SPECIAL FIRE FIGHTING PROCEDURES:
- Evacuate all personnel immediately.
- Do not breathe smoke.
- Normally this type of material is allowed to burn without trying to extinguish it. If fire reaches cargo, evacuate all personnel, including emergency responders for 1500 feet (1/3 mile) in all directions.

5.3 UNUSUAL FIRE AND EXPLOSION HAZARDS:
- Fight fires from a safe distance. Depending on design and condition, safety devices may become dangerous projectiles.

6 ACCIDENTAL RELEASE MEASURES

6.2 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
- In the case of damage of the safety device’s housing, resulting in the release of the pyrotechnic materials, keep all ignition sources such as heat, impact, sparks and electrostatic discharge away.
- In the case of an integrated compressed gas container, compressed gases may escape abruptly, and can, in large quantities, act as an asphyxiant. See Section 8.0 for further details.

6.3 ENVIRONMENTAL PRECAUTIONS
- Contain any spills of safety devices. Prevent devices from entering natural bodies of water. (e.g. lakes, rivers, and streams).
- Follow all current and applicable laws and regulations.

6.4 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP
Where safety devices have become damaged, pyrotechnic material may be released. If so, explosive experts should then pick up pyrotechnic material while wearing nitrile gloves, and place in a container with water. Clean-up any spilled material using equipment that will not generate static, such as a horse hair brush, for clean-up operation. Dispose collected material in accordance with governmental regulations.
7 HANDLING AND STORAGE

GENERAL REQUIREMENTS:

The handling and use of safety devices should only be performed by trained individuals. Following the activation of a safety device, it must be verified that all stages of multi-stage devices have been deactivated and depressurized.

7.1 HANDLING:

- Do not connect to an inappropriate electrical power source. Only approved connections to the on-board electronics in the vehicle or suitable testing devices with a measured current of a max of 0.01 A are permitted.
- After sustaining a mechanical impact, safety devices must be inspected for damage, and managed for disposal if the device’s housing is damaged.
- Do not attempt to modify, repair or open devices.
- Do not remove electrical shunt clips or jumper wires installed on, or within electrical connectors.
- The manufacturer’s state of construction on delivery may not be changed or modified.
- Keep away from ignition sources and protect against heat and sparks.
- Take precautionary measures to prevent electrostatic charging of devices, or static discharges to devices.
- Avoid use of sources of electromagnetic radiation (e.g. radiotelephones, walkie-talkies, or mobile telephones) in the proximity (approx. 2 m) of damaged devices.
- When handling air bag modules, keeps the module facing upward and away from personnel.
- When handling Safety Devices, protect hands and keep the mechanically movable parts away from body.
- Where applicable, observe manufacturer’s installation and dismantling instructions.

7.2 STORAGE:

- Observe regulations specific to each country for storage.
- Store in a dry location in the original packaging.
- Protect from sources of heat, electrical sparks or open flames, mechanical impacts, and electrostatic charging.

7.3 SPECIFIC APPLICATIONS:

- Safety Devices shall only be used for their designated purpose as automotive safety devices.
- Safeguard against theft of safety devices.

8 EXPOSURE CONTROLS /PERSONAL PROTECTION

8.1 EXPOSURE THRESHOLD LIMIT VALUES FOR SAFETY DEVICES:

- NONE
8.2 EXPOSURE THRESHOLD LIMIT VALUES FOR COMBUSTION PRODUCTS AFTER DEPLOYMENT:

<table>
<thead>
<tr>
<th>Description</th>
<th>CAS-No</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Dioxide</td>
<td>124-38-9</td>
<td>5000ppm</td>
<td>5000ppm</td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>630-08-0</td>
<td>50ppm</td>
<td>25ppm</td>
<td></td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>10102-44-0</td>
<td>5ppm</td>
<td>3ppm</td>
<td></td>
</tr>
</tbody>
</table>

Comments:
ACGIH Particulates (Not Otherwise Classified)

Inhalable fraction 10 mg/m³
Respirable fraction 3 mg/m³

8.3 THRESHOLD LIMITS AND MONITORING OF EXPOSURE AT THE WORKPLACE

When handling non-activated devices:

<table>
<thead>
<tr>
<th>Protection Type</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Hearing Protection:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Hand Guards:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Eye Protection:</td>
<td>Safety Glasses</td>
</tr>
<tr>
<td>Body Protection:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Protective and hygiene measures:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Threshold limits/monitoring of the environmental exposition:</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

When the device is activated (e.g. Testing Purposes):

<table>
<thead>
<tr>
<th>Protection Type</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection:</td>
<td>Appropriate respiratory protection must be worn if the workplace threshold values are exceeded.</td>
</tr>
<tr>
<td>Hearing Protection:</td>
<td>When activating devices, wear hearing protection.</td>
</tr>
<tr>
<td>Hand Guards:</td>
<td>No contact with activated, hot objects. Protective gloves made of cotton or leather when handling following activation and cooling off.</td>
</tr>
<tr>
<td>Eye Protection:</td>
<td>Safety Glasses</td>
</tr>
<tr>
<td>Body Protection:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Protective and hygiene measures:</td>
<td>Do not inhale combustion gas and residue. Avoid contacting skin with residue. If it occurs, wash off with water.</td>
</tr>
<tr>
<td>Threshold limits/monitoring of the environmental exposure:</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

n.a.: not applicable
9 Physical and chemical properties

9.1 GENERAL INFORMATION:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid Manufactured Article</td>
</tr>
<tr>
<td>Color</td>
<td>No Specific Color</td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>&gt;130°C</td>
</tr>
<tr>
<td>Electrical Current Activation</td>
<td>&gt;0.15A</td>
</tr>
<tr>
<td>Flammability Limit</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>LEL</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>UEL</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Water Reactive</td>
<td>Not reactive in water</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not soluble in water</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>% Volatile by Weight</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

10 STABILITY AND REACTIVITY

No hazardous reactions are expected if handled and stored properly.

10.1 STABILITY:
- Stable under normal ambient conditions of temperature and pressure.

10.2 REACTIVITY:
- No reactivity issues
- Normal activation of the object begins at 130 °C and through electrical current beginning at 0.15 A.

10.3 CONDITIONS TO BE AVOIDED:
- See Section 7.

10.4 INCOMPATIBILITY-MATERIALS TO BE AVOIDED:
- Avoid contact with corrosive media such as acids, bases, oils or solvents.

10.5 HAZARDOUS DECOMPOSITION PRODUCTS:
- When safety devices are activated, carbon dioxide, carbon monoxide, oxides of nitrogen and particulate may result.
11 TOXICOLOGICAL INFORMATION

When used correctly, no toxicological hazards are anticipated.

12 ECOLOGICAL INFORMATION

When used correctly, no environmental damage is expected. The pyrotechnical ingredients contained in the device are hermetically sealed and cannot be released under normal conditions of use.

The pyrotechnical objects for vehicles can contain perchlorate as ingredients. Special handling requirements may apply when in the state of California due to Perchlorate Material sealed within the safety device. Refer to the following link for State specific precautions:

www.dtsc.ca.gov/hazardouswaste/perchlorate

13 DISPOSAL CONSIDERATION

Un-activated or partially activated devices may be considered hazardous waste for the purposes of disposal or recycling. Safety Devices which have not been activated or only partially activated must only be disposed of by companies properly licensed to complete such work in accordance with local regulations. Contact your State or Federal Environmental Regulatory agency to determine the handling requirement within your area. Any safety devices damaged by fire, heat or an accident should be managed as non-activated objects.

14 TRANSPORTATION INFORMATION

ACCORDING TO DOT (ROAD/RAIL), IMDG (SEA) AND ICAO/IATA (AIR FREIGHT):

Classification is dependent on the type of object, the packaging and, if applicable, the existing assignment by the responsible authority. This material is hazardous as defined by 49 CFR 172.101, 173.56, and 173.166 by the U.S. Department of Transportation and the United Nations Model Regulations. Transport only in approved shipping containers according to federal, state, and local regulations.

This SDS is not intended to have all required shipping information.

Classification

- UN 3268, Safety Devices, Class 9, PG III

OTHER RELEVANT INFORMATION:

Safety Devices may only be transported within or through the United States of America with an approval from the Department of Transportation or a person or agency who is authorized by the Associate Administrator to perform examination and testing of explosives under §173.56. For further information contact TK Holdings Inc. for the proper USDOT competent authority approvals.
15 REGULATORY INFORMATION

TSCA Status: In compliance with 49 CFR Part 710, all components of this product are listed on the US-TSCA Chemical Inventory or otherwise exempt from the inventory reporting rules.

| CERCLA Reportable Quantity, 40 CFR 302 | No |
| EPCRA Section 302, Extremely Hazardous Substances | No |
| EPCRA Section 311/312, Hazard Category | No |
| EPCRA Section 313, Toxic Chemicals | No |

RCRA INFORMATION:

To the best of our knowledge, there are no RCRA regulations that apply to this article. However, all federal, provincial, state, and local regulations should be reviewed prior to disposal.

EU CLASSIFICATIONS ...........................................................Xn

16 OTHER INFORMATION


The information contained herein only describes the safety requirements of the product and is based on the present state of our knowledge. It does not represent a legal guarantee of the properties of the product described. The recipients of our product have sole responsibility for complying with existing laws and regulations.

The safety and product information contained in this safety data sheet must be made available to the users, employees and all other persons who handle this product before using the product. In order to eliminate hazards, the information for the safe handling and storage must be followed. The manufacturer assumes no responsibility for any bodily injury or property damage, or similar, which results from the improper use or non-compliance with guidelines of the safety data sheet.