December 8, 2010

U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety Administration**

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

DOT-SP 12135
(NINTH REVISION)

EXPIRATION DATE: August 31, 2014

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Daicel Safety Systems, Inc.
Hyogo, Japan
(U.S. Agent: Thompson Hine LLP, Washington, DC)

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the manufacture, marking, sale, and use of non-DOT specification cylinders (pressure vessels) for use as components of automobile vehicle safety systems. These pressure vessels may be charged with non-toxic, non-liquefied gases, or mixtures thereof and are authorized for transportation in commerce subject to requirements and limitations specified herein. This special permit provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated. The most recent version supersedes all pervious revisions.

b. FIVE-YEAR TRANSPORTATION AUTHORIZATION: This special permit authorizes transportation of the pressure vessels identified herein for up to five years from the date of manufacture. This limitation does not apply to non-specification pressure vessels when installed in air bag modules. This special permit provides no certification of safety for end use environments and life cycles.

c. SPECIAL PERMIT SCOPE LIMITATIONS: This special permit only applies to a package when it is an article of commerce in transportation. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards

and risks associated with consumer use, incorporation as a component of a vehicle or other device, or other uses not associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.301(a)(1) and 173.302a insofar as non-DOT specification cylinders are not authorized, except as specified herein.

5. BASIS: This special permit is based on the emergency modification application of Daicel Safety Systems, Inc. dated July 9, 2010, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi-fication Number**	**Packing Group**
Air bag inflators, *or* Air bag modules, *or* Seat-belt pretensioners	9	UN3268	III
Non-toxic, non-liquefied gases and mixtures thereof/ Proper shipping name as specified in § 172.101	2.1	As appro-priate	N/A

Note: A safety system or component which contains a quantity of pyrotechnic materials must be classed and approved as provided for in § 173.56 of the Hazardous Materials Regulations (HMR). If the pyrotechnic material augments the volume of the gas in the pressure vessel, or in any way enhances the performance of the compressed gas, the device must be tested in the same configuration as when shipped.

7. SAFETY CONTROL MEASURES: Packaging prescribed is a non-DOT specification pressure vessel meeting the following requirements:

a. PACKAGING:

(1) The maximum service pressure at 70°F may not exceed 8990 PSIG. The minimum test pressure is the pressure of the contents at 200°F. The rated service pressure may not exceed 80 percent of the test pressure and the water volume of each pressure vessel may not exceed one liter.

(2) Material of construction must conform to all requirements of § 178.65(b), except that aluminum is limited to 6061 alloy of T6 temper.

(3) Manufacturing requirements must conform to all requirements of § 178.65(c).

(4) The minimum wall thickness must be such that the wall stress meets the requirements of § 178.65(d).

(5) Openings and attachments must conform to all requirements of § 178.65(e) except as follows:

§ 178.65(e)(1) Sidewall openings and attachments are authorized provided the openings and attachments are not detrimental to the structural integrity of the cylinder. This must be demonstrated through certification by the Independent Inspector as provided in paragraph 8.g. of this special permit. Drawings showing openings and attachments must be on file with the Office of Hazardous Materials Office of Special Permits and Approvals. Welding or brazing of the attachments must be completed prior to all final pressure tests.

(6) Each pressure vessel must be equipped with a pressure relief device designed to meet all the requirements for a rupture disk prescribed in the Compressed Gas Association (CGA) Pamphlet S-1.1. The pressure relief device must be capable of preventing rupture of the pressure vessel when subjected to fire test conducted in accordance with CGA Pamphlet C-14.

(7) Pressure vessels, components, and vehicle safety systems must be transported in strong outside packaging in accordance with § 173.301(a)(9).

b. TESTING:

(1) Each pressure vessel must be tested as required in § 178.65(f)except as follows:

(i) § 178.65(f)(1). The hold time at test pressure may be limited to that which is adequate to ensure compliance with the requirements contained in § 178.65(f)(1) subparagraphs (i) and (ii).

(ii) § 178.65(f)(2)(i). A failure occurs at a gage pressure less than 2.0 times the test pressure; for pressure vessels with welded sidewall attachments, the failure must not occur at a gage pressure less than 2.2 times the test pressure.

(2) A representative vehicle safety system, packaged as it would be for shipment, must be activated and no materials other than non-toxic, non-flammable vapors or gases may be expelled from the package.

8. SPECIAL PROVISIONS:

a. This special permit is limited to pressure vessels used as components of a vehicle safety system. The pressure vessels are excepted from the requirements of the HMR, Part 178 when the design has been certified by an Independent Inspection Agency, approved under § 107.803 as having met all the requirements of this special permit.

b. The Independent Inspection Agency's design certification must include test results and documents related to explosive classification and approval. A copy of the certification must be maintained at each facility where the vehicle safety system is manufactured and by the Independent Inspection Agency for a period of 15 years from the date of completion of the design certification.

c. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or changes are made to the package and it is offered for transportation in conformance with this special permit and the HMR.

d. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

e. Each packaging manufactured under the authority of this special permit must be either: (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured; or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

f. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

g. Daicel Safety Systems, Inc. must comply with all provisions of this special permit, and all other applicable requirements contained in the HMR, Parts 171-177.

No modifications may be made to the pressure vessel, pyrotechnic components or production vehicle safety system which would affect the performance of the vehicle safety system or its compliance with the requirements of this special permit until such modifications have been reviewed, tested and certified by an Independent Inspector as meeting the requirements of this special permit.

h. Except when transported on passenger carrying aircraft, devices utilizing the non-DOT specification pressure vessel authorized herein are exempt from the requirements of 49 CFR Parts 100-199 when installed in a motor vehicle or in completed vehicle components such as steering columns or door panels.

i. This special permit is to serve as an authorization of The Competent Authority for the United States (**CA-9812007**) in accordance with Packaging Instruction 917 and 200 of the International Civil Aviation Organization's Technical Instructions for the Safe Transportation of Dangerous Goods by Air (ICAO TI).

j. MARKING:

Each pressure vessel must be durably marked as follows:

DOT SP-12135/8990[1]
lot No. xxxxx[2]
Manufacturer's Name
This Pressure Vessel May Not Be Refilled

[1] Where 8990 represents the design service pressure.
[2] Where xxxxx is the lot number as appropriate.

Note: Each line of these markings may be placed without regard to location or order on the pressure vessel.

k. Transportation of Division 2.1 (flammable gases) materials are not authorized aboard cargo vessel or aircraft unless specially authorized in the Hazardous Materials Table (§ 172.101).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only (see restriction in paragraph 8.m).

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel and aircraft used to transport the packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
- Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.
PO: swa