A10.5.4. Package in the following composite packages with glass, porcelain, or stoneware inner receptacles:

Inner receptacle	Outer packaging
Glass, porcelain, or stoneware	**Drums:** steel, aluminum, plywood, or fiber drum (6PA1, 6PB1, 6PD1, or 6PG1) ***or*** **Boxes:** steel, aluminum, wooden, or fiberboard box (6PA2, 6PB2, 6PC, or 6PG2) ***or*** expanded or solid plastic packaging (6PH1 or 6PH2)

A10.6. Package Class 6.1, PG I, Hazard Zone A and B (Poisonous by Inhalation) as follows:

A10.6.1. Handling Instructions. These items are extremely dangerous. Make approved chemical safety mask and clothing available when handling this material, and wear when handling leaking packages.

A10.6.2. Hazard Zone A Packaging Requirements. Package Class 6.1, PG I materials with an Inhalation Hazard Zone A as follows:

A10.6.2.1. In seamless DOT or UN specification cylinders that conform to 49 CFR Section 173.40 and one of the specifications for cylinders in 49 CFR Part 178, Subpart C, except that specification 8, 8AL, and 39 cylinders are not authorized. Ensure cylinders also meet the requirements of A3.3.2.

A10.6.2.2. In an inner drum (1A1, 1B1, 1H1, 1N1 , or 6HA1), then place in an outer drum (1A2 or 1H2). Test both the inner and outer drum to the PG I performance level. An outer 1A2 drum requires a minimum thickness of 1.35 mm (0.053 inches). An outer 1H2 drum requires a minimum thickness of 6.30 mm (0.248 inches). The capacity of the inner drum may not exceed 220 L (58 gallons). Ensure the outer drum (1A2 or 1H2) can withstand a hydrostatic test pressure of 100kPa (15 psig). Cushion the inner drum within the outer drum with a shock-mitigating, nonreactive material which completely surrounds the inner packaging on all sides. Ensure the inner drum also meets the following requirements:

A10.6.2.2.1. Satisfactorily withstand a hydrostatic pressure test (as outlined in 49 CFR Section 178.605) of 300 kPa (45 psig).

A10.6.2.2.2. Satisfactorily withstand a leakproofness test (as outlined in 49 CFR Section 178.604) using an internal air pressure at 55 degrees C (131 degrees F) of at least twice the vapor pressure of the material to be packaged.

A10.6.2.2.3. Have screw-type closures that meet all the following requirements:

A10.6.2.2.3.1. Closed and tightened to a torque as prescribed by the closure manufacturer, using a device that is capable of measuring torque.

A10.6.2.2.3.2. Physically held in place by any means capable of preventing back-off or loosening of the closure by impact or vibration during transportation.

A10.6.2.2.3.3. Provided with a cap seal that is properly applied according to the cap seal manufacturer's recommendations. Ensure the cap seal is capable of withstanding an internal pressure of at least 100 kPa (15 psig).

A10.6.2.2.4. Meet the following minimum thickness requirements:

A10.6.2.2.4.1. 1A1 and 1N1 drums has a minimum thickness of 1.3 mm (0.051 inch).

A10.6.2.2.4.2. 1B1 drums have a minimum thickness of 3.9 mm (0.154 inch).

A10.6.2.2.4.3. 1H1 drums have a minimum thickness of 3.16 mm (0.124 inch).

A10.6.2.2.4.4. 6HA1 drums the plastic inner containers have a minimum thickness of 1.58 mm (0.0622 inch) and the outer steel drums have a minimum thickness of 0.96 mm (0.0378 inch).

A10.6.2.3. Pack in combination packagings with an inner packaging system that consists of an impact-resistant receptacle of glass, earthenware, plastic, or metal, securely cushioned with a nonreactive absorbent material packed within a leak-tight packaging of metal or plastic. The capacity of the inner receptacle may not exceed 4 L (1 gallon). An inner receptacle that has a closure requires a closure that is held in place by any means capable of preventing back-off or loosening of the closure by impact or vibration during transportation. Pack the inner packaging system in an outer steel drum (1A2), aluminum drum (1B2), plywood drum (1D), fiber drum (1G), plastic drum (1H2), metal drum (other than steel or aluminum) (1N2), steel box (4A), aluminum box (4B), natural wood box (4C1 or 4C2), plywood box (4D), reconstituted wood box (4F), fiberboard box (4G), expanded plastic box (4H1), solid plastic box (4H2) or metal box (other than steel or aluminum) (4N). Both the inner packaging system and the outer container each meeting the test requirements of the PG I performance level independently. The total amount of liquid that can be packed in the outer container may not exceed 16 L (4 gallons).

A10.6.3. Hazard Zone B Packaging Requirements. Package Class 6.1, PG I materials with an Inhalation Hazard Zone B as follows:

A10.6.3.1. In seamless DOT or UN specification cylinders that conform to 49 CFR Section 173.40 and one of the specifications for cylinders in 49 CFR Part 178, Subpart C, except that specification 8, 8AL, and 39 cylinders are not authorized. Ensure cylinders also meet the requirements of A3.3.2.

A10.6.3.2. In an inner drum (1A1, 1B1, 1H1, 1N1 , or 6HA1), then place in an outer drum (1A2 or 1H2). Both the inner and outer drum require testing to the PG I performance level. An outer 1A2 drum requires a minimum thickness of 1.35 mm (0.053 inches). An outer 1H2 drum requires a minimum thickness of 6.30 mm (0.248 inches). The capacity of the inner drum may not exceed 220 L (58 gallons). Ensure the outer drum (1A2 or 1H2) can withstand a hydrostatic test pressure of 100kPa (15 psig). Cushion the inner drum within the outer drum with a shock-mitigating, nonreactive material which completely surrounds the inner packaging on all sides. The inner drum must also meet the following requirements:

A10.6.3.2.1. Satisfactorily withstand a leakproofness test (as outlined in 49 CFR Section 178.604) using an internal air pressure at 55 degrees C (131 degrees F) of at least twice the vapor pressure of the material to be packaged.

A10.6.3.2.2. Have screw-type closures that meet all the following requirements:

A10.6.3.2.2.1. Closed and tightened to a torque as prescribed by the closure manufacturer, using a device that is capable of measuring torque.

A10.6.3.2.2.2. Physically held in place by any means capable of preventing back-off or loosening of the closure by impact or vibration during transportation.

A10.6.3.2.2.3. Provided with a cap seal that is properly applied according to the cap seal manufacturer's recommendations. The cap seal must be capable of withstanding an internal pressure of at least 100 kPa (15 psig).

A10.6.3.2.3. Meet the following minimum thickness requirements:

A10.6.3.2.3.1. 1A1 and 1N1 drums must have a minimum thickness of 0.69 mm (0.027 inch).

A10.6.3.2.3.2. 1B1 drums must have a minimum thickness of 2.79 mm (0.110 inch).

A10.6.3.2.3.3. 1H1 drums must have a minimum thickness of 1.14 mm (0.045 inch).

A10.6.3.2.3.4. 6HA1 drums the plastic inner container must have a minimum thickness of 1.58 mm (0.0622 inch) and the outer steel drum must have a minimum thickness of 0.70 mm (0.027 inch). **(T-0)**.

A10.7. Package Tear Gas Candles as follows: Any newly developed packaging requires approval from the DOT before initial transportation from the manufacturer. Package tear gas candles, tear gas grenades, and similar devices (with more than 2 percent tear gas substance by mass).

A10.7.1. Pack in steel (4A), aluminum (4B), metal-strapped natural wood box (4C1 or 4C2), metal-strapped plywood box (4D), metal-strapped reconstituted wood box (4F), or other metal (4N). Pack functioning elements not assembled in grenades or devices in a separate compartment within the box, pack in inner boxes, then place inside the outer box, or pack in a separate outside wooden (4C1, 4C2, 4D, or 4F) box. Pack and cushion the elements so they cannot come into contact with each other or in contact with the walls of the box during transportation. No more than 50 items and 50 functioning elements can be packed in one outer container. The gross weight of the outer container may not exceed 35 kg (77 pounds). Tear gas devices can be shipped completely assembled provided the functioning elements are packed so that they cannot accidentally function. Package items completely assembled as specified in this paragraph.

A10.7.2. Pack in steel (1A2), aluminum (1B2), plastic (1H2) or other metal (1N2) drums. Pack functioning elements in a separate inner packaging or separate compartment. Pack no more than 24 items and 24 functioning elements in one outer drum. The gross weight of the outer container may not exceed 35 kg (77 pounds).

A10.7.3. DOT 2P and 2Q. Pack in inner containers meeting the DOT 2P or 2Q specification (inside nonrefillable metal containers), then package in a fiberboard box (4G). Place each inside container into fiberboard tubes with metal ends or a fiberboard box with suitable