



- x identification number UN 1845
- x proper shipping name of Carbon Dioxide, solid B (Dry Ice)
- x Accordance with Packing Instruction 954 (can be found in [Appendix E](#))

These are the basic requirements for shipments of dry ice

1. Gas venting: packages must allow for release of carbon dioxide gas. Dry ice must

be packaged in a way that allows for the release of carbon dioxide gas.

Do not use plastics that can be rendered brittle or permeable by the temperature of dry ice. This problem can be avoided by using commercially available packages intended to contain dry ice, see [Appendix A](#) (e.g., Saf-Pak STP 310 or Source Packaging 5000).

4. Airbill Wording: The airbill must include the following information: number of packages, net weight in kilograms, & gross weight of the package. Airborne Express requires a slightly different format; see [Appendix C, figure C.1](#). Check with the courier to obtain or ensure proper completion of their paperwork.

5. Marking the package. The shipping container must be marked with the following: Place two labels, one on each opposite side of box

- a) The net weight of the dry ice in kilograms in the order and in English;
- b) The FULL name and address of the shipper and consignee (where/who it is being shipped to);
- c) The net quantity of dry ice within each package in kilograms.

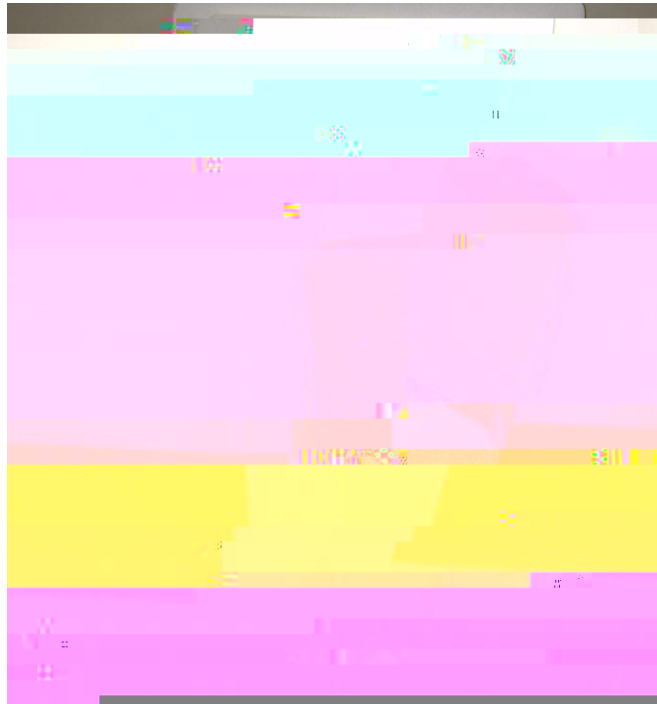
6. Labeling: the outermost container must be labeled with a hazard class 9 label, UN 1845, and net weight of dry ice in kilograms. A printable version is included in [Appendix D](#). The label should be affixed to a vertical side of the box (not the top or bottom) and oriented as shown in [Appendix D](#). The maximum allowable net quantity of dry ice allowed per package is 200 kg. Place one of these labels on two opposing sides of the box.

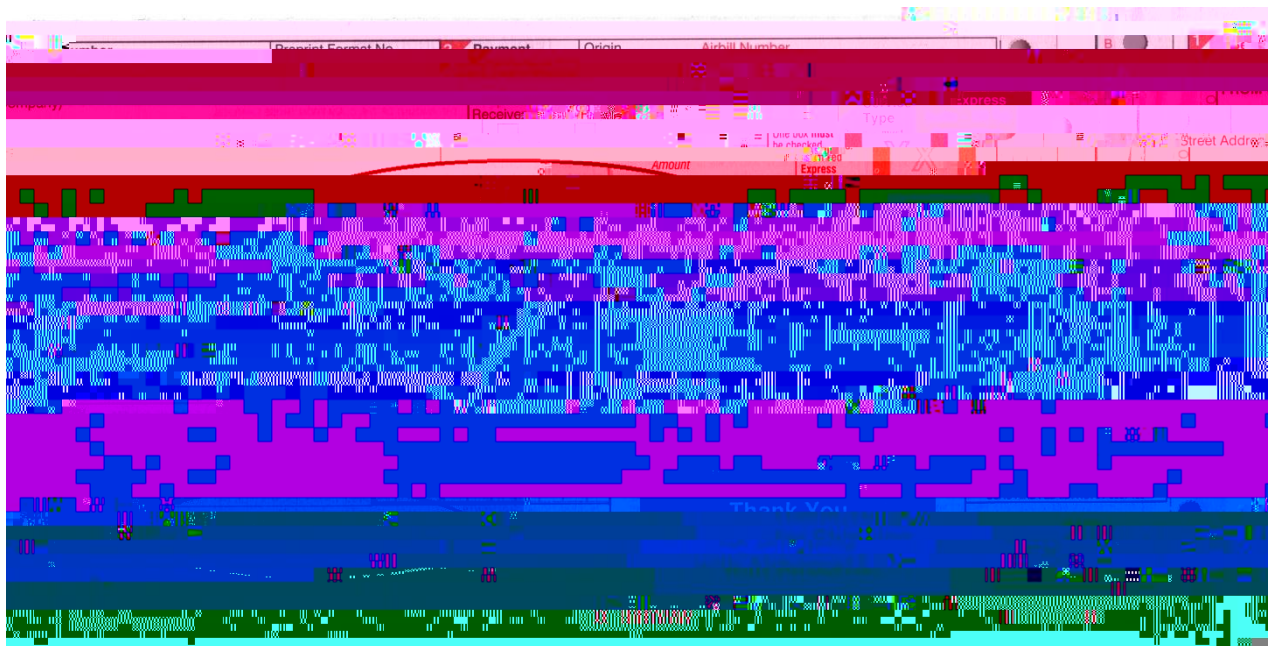
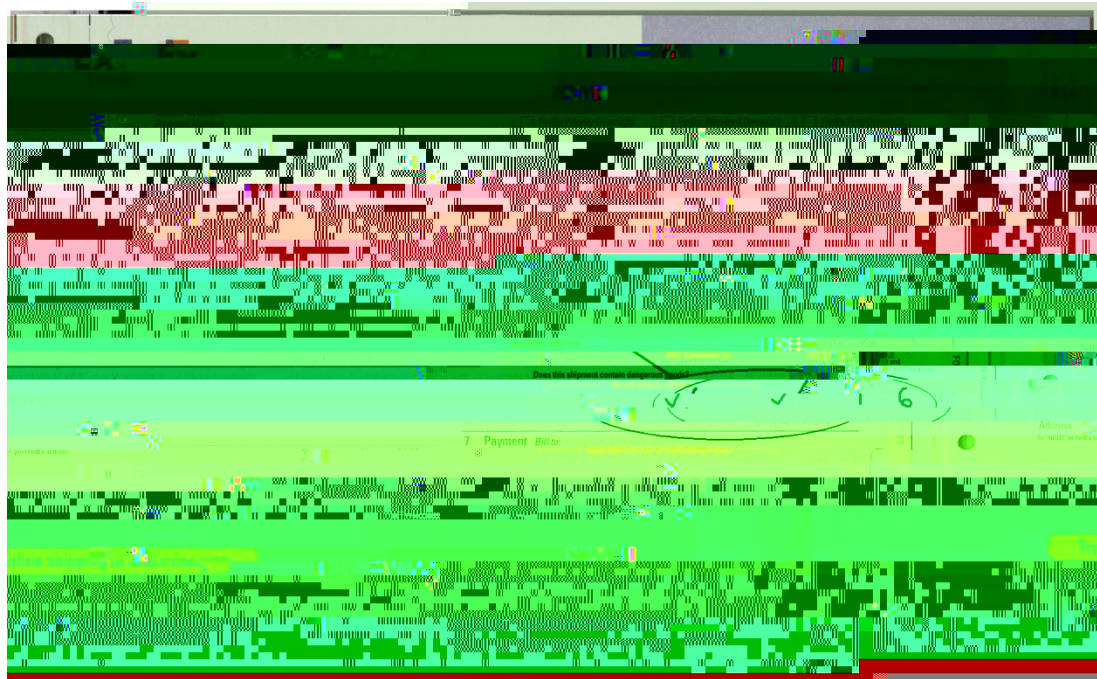
Appendix: Manufacturers of Dry Ice Shipping Containers

Air Se

Appendix B: Sample image of typical Dry Ice Shipping Container.

The typical Dry Ice shipping container features an internal foam core with cardboard box exterior. DO NOT tape the Styrofoam to or the box top on tightly. Taping should be secure but NOT air tight.





Appendix E. PACKING INSTRUCTION 954 t Class 9t Miscellaneous Dangerous Goods

STATE VARIATION BEG05 SAC04 USG12

OPERATOR VARIATION BLS01 CA08 CG09 CS09 HP02 IG08 KE06 US02 VN11

This instruction applies to UN 1845 on passenger and cargo aircraft and CAO. The General Packing Requirements of 6.0.2 must be met.

Carbon dioxide, solid (dry ice) in packages, when offered for transport by air, must be in packaging designed and constructed to permit the release of carbon dioxide gas and to prevent a buildup of pressure that could rupture the packaging.

Arrangements between shipper and operator(s) must be made for each shipment, to ensure ventilation safety procedures are followed.

The Shipper's Declaration requirements of Subsections 8.1 and 10.8.1 are only applicable when the Carbon dioxide, solid (dry ice) is used as a refrigerant for dangerous goods that require a Shipper's Declaration.

When a Shipper's Declaration is not required, the following information, as required by 8.2.3 for the Carbon dioxide, solid (dry ice) must be provided:

- x UN 1845;
- x proper shipping name (Dry ice or Carbon dioxide, solid);
- x Class 9;
- x the number of packages; and
- x the net quantity of dry ice in each package.

The net weight of the Carbon dioxide, solid (dry ice) must be marked on the outside of the package.

Dry ice used as a refrigerant for other than dangerous goods may be shipped in a unit device or other type of pallet prepared by a single shipper provided that the shipper has made prior arrangements with the operator. In such cases, the unit device, or other type of pallet must allow the venting of the carbon dioxide gas to prevent a dangerous buildup of pressure. The shipper must provide the operator with written documentation stating the total quantity of the dry ice contained in the unit device or other type of pallet.

Notes

1. Refer to the relevant airline's loading procedures for Carbon dioxide, solid (dry ice) limitations.
2. For Air Waybill requirements see 8.2.3. For loading instructions see 9.3.12.
3. For cooling purposes, an overpack may contain Carbon dioxide, solid (dry ice) provided that the overpack meets the requirements of Packing Instruction 904.