



Beyond Blue

Safe Shipping and Handling Recommendations for North American Reduced GWP Styrofoam™ Brand XPS Products

These safe shipping and handling recommendations apply to the following product families using **Reduced GWP Styrofoam™ Brand XPS**, i.e. "Beyond Blue" grey XPS:

Construction Product Families

Styrofoam™ Brand Ag Board ST-100
Styrofoam™ Brand Cavitymate™ ST-100
Styrofoam™ Brand Cladmate™ ST-100
Styrofoam™ Brand Deckmate™ ST-100
Styrofoam™ Brand Duramate™ ST-100
Styrofoam™ Brand Freezermate™ ST-100
Styrofoam™ Brand Highload ST-100
Styrofoam™ Brand Panel Core ST-100
Styrofoam™ Brand Panelmate™ ST-100
Styrofoam™ Brand Perimate™ ST-100
Styrofoam™ Brand Plazamate™ ST-100
Styrofoam™ Brand Recovermate ST-100

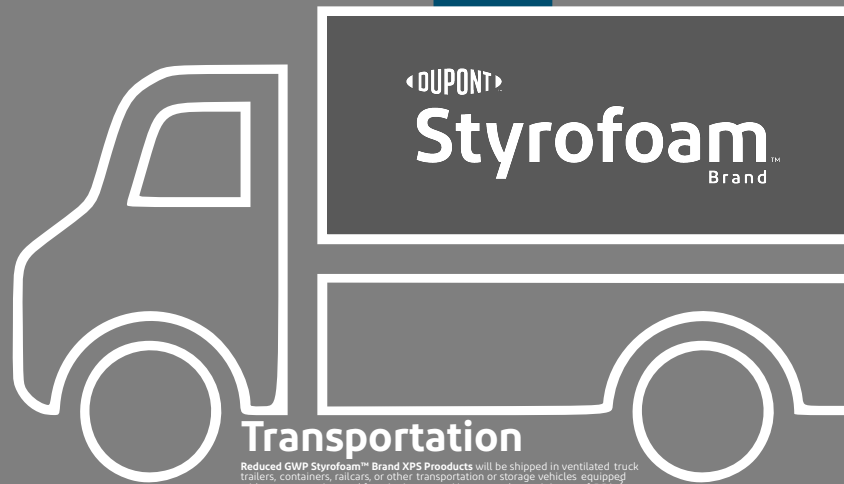
Styrofoam™ Brand Residential Sheathing ST-100
Styrofoam™ Brand Residing Board ST-100
Styrofoam™ Brand Roofmate™ ST-100
Styrofoam™ Brand Scoreboard ST-100
Styrofoam™ Brand SM ST-100
Styrofoam™ Brand Square Edge ST-100
Styrofoam™ Brand Styrospan™ ST-100
Styrofoam™ Brand Tongue and Groove ST-100
Styrofoam™ Brand Ultra ST-100
Styrofoam™ Brand UtilityFit™ ST-100
Styrofoam™ Brand Wallmate™ ST-100
Styrofoam™ Brand Z-mate™ ST-100

Specialty Product Families

Styrofoam™ Brand Buoyancy Billets ST-100
Styrofoam™ Brand Floral & Craft ST-100
Styrofoam™ Brand Pipe Insulation ST-100

The **Reduced GWP Styrofoam™ Brand XPS Products** contain residual levels of a blowing agent that will slowly diffuse out of the foam over an extended period of time. Ventilation is required to ensure that the vapor released by the foam does not accumulate and reach a flammable concentration.

Reduced GWP Styrofoam™ Brand XPS Products are not classified as hazardous materials. However, all transportation methods, storage, fabrication, and downstream scrap and waste processing should incorporate adequate ventilation to prevent accumulation of vapor.



Transportation

Reduced GWP Styrofoam™ Brand XPS Products will be shipped in ventilated truck trailers, containers, railcars, or other transportation or storage vehicles equipped with two appropriate and functioning vents. Vents must be a minimum of 5.5 in² per 1000 cu ft (24 in² for a typical 53 ft long van trailer), with one vent placed high at one end of the compartment and one placed low at the other end of the compartment. The vents must be permanently open or be capable of being locked or sealed in the open position by the shipping crew. Flat bed trucks are considered ventilated trailers.

Safe Operating Procedures for Billet Foam
Billet foam is a highly flammable material and should be stored in well-ventilated areas. Products should not be stored in closed, unventilated spaces or areas where vapor released by the product can accumulate to flammable concentrations. Do not store near high heat or ignition sources. Smoking and other ignition sources should not be allowed in product storage areas. **Reduced GWP Styrofoam™ Brand XPS Products** should be tarped or covered to protect from weather. Do not use clear plastic covering film. Care should be taken to protect exposed foam from sunlight.

Storage

Reduced GWP Styrofoam™ Brand XPS Products must be stored in well-ventilated areas. Products should not be stored in closed, unventilated spaces or areas where vapor released by the product can accumulate to flammable concentrations. Do not store near high heat or ignition sources. Smoking and other ignition sources should not be allowed in product storage areas. **Reduced GWP Styrofoam™ Brand XPS Products** should be tarped or covered to protect from weather. Do not use clear plastic covering film. Care should be taken to protect exposed foam from sunlight.

Fabrication

Operations which cut **Reduced GWP Styrofoam™ Brand XPS Products**, such as saw and hot wire cutting, routing, grinding, and planing will release the blowing agent blend from the product. Ventilation is needed to prevent the vapor from accumulating and reaching a flammable concentration. Fabrication equipment with large throughput may need fans or forced air purges to dilute blowing agent concentrations at localized cutting points or cut layer seams. Do not smoke or use other ignition sources when handling and fabricating the product. Product fabrication and part processing systems and procedures should be assessed, and actions taken to dilute and prevent the accumulation of flammable concentrations of blowing agent blend when those operations are idled or shut down due to malfunctions. Dust and waste vacuum systems, transfer lines, bins, hoppers, baghouses, boxes and bags that received dust, shrapnel, or pieces of product should have sufficient positive air flow to dilute and prevent the accumulation of flammable concentrations of the vapor. Product scrap, dust, and waste collection processing systems and procedures should be assessed, and actions taken to prevent the accumulation of flammable concentrations of blowing agents when those operations are idled or shut down due to malfunctions. Smoking and other ignition sources should not be allowed in areas where product scrap and waste are handled or stored.



Fabricated Foam Storage
Fabricated foam products should be stored in well-ventilated areas. Products should not be stored in closed, unventilated spaces or areas where vapor released by the product can accumulate to flammable concentrations. Do not store near high heat or ignition sources. Smoking and other ignition sources should not be allowed in product storage areas. **Reduced GWP Styrofoam™ Brand XPS Products** should be tarped or covered to protect from weather. Do not use clear plastic covering film. Care should be taken to protect exposed foam from sunlight.

Fabricated Foam Shipping
Fabricated foam products should be shipped in ventilated truck trailers, containers, railcars, or other transportation or storage vehicles equipped with two appropriate and functioning vents. Vents must be a minimum of 5.5 in² per 1000 cu ft (24 in² for a typical 53 ft long van trailer), with one vent placed high at one end of the compartment and one placed low at the other end of the compartment. The vents must be permanently open or be capable of being locked or sealed in the open position by the shipping crew. Flat bed trucks are considered ventilated trailers.

Waste Processing

Foam scrap, fabrication waste, and dust from fabrication operations may release vapor for an extended period of time. Do not store scrap or waste in areas or containers that have high heat or ignition sources. Ventilation may be needed to prevent the accumulation of vapor in waste streams, waste collection points, waste containers, trash bins, dumpsters, and waste disposal areas. Foam scrap and waste being packaged for shipment, disposal, or recycling should be placed in container which allows the vapor to escape and dissipate with ventilation. Scrap and waste handling systems and procedures should be assessed, and actions taken to prevent the accumulation of flammable concentrations of vapor when ventilation systems are idled or shut down due to malfunctions. Foam scrap and waste shipping methods should also be assessed, and actions taken to prevent the accumulation of vapor in shipping containers and trailers. The use of ventilated trailers or other shipping containers may be needed. Do not smoke or use other ignition sources when handling, storing, or transporting foam scrap and waste.



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