

March 1, 2021

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

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 scraps and waste processing should incorporate adequate ventilation to prevent accumulation of vapor.

Transportation & Ventilation Requirements

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 in²/1000 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 Opening Procedure: Although shipment of foam in properly ventilated trailers and other containers should prevent the build-up of a flammable concentration, the following additional precautions should be taken when opening compartments containing foam:

- a. Extinguish all smoking material and other ignition sources. Do not use open flames or lighters.
- b. Verify that the trailer or container vents are open. If the trailer or container vents are not open, open vents and allow air circulation in the vehicle 24 hours before opening the doors.
- c. Allow air circulation in the vehicle for at least 10 minutes after opening the doors and before entering or removing foam.

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 keep exposed foam protected 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, shred 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 a 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 Part Storage

Fabricated foam parts typically have large surface areas and will initially give off blowing agents at faster rates. The emission rate will vary considerably with the size and shape of the part and storage temperatures. Fabricated foam parts should be stored in well ventilated areas and with adequate spacing to prevent vapor from accumulating and reaching a flammable concentration.

Fabricated foam parts being packaged for shipment should be placed in containers which allow the vapor to escape and dissipate with ventilation. Smoking and other ignition sources should not be allowed in areas where fabricated foam parts are stored.

Fabricated Part Shipping

Fabricated foam parts will continue to give off the vapor for an extended period of time. Foam shipping methods will need to be assessed to determine safe shipping requirements. The use of ventilated trailers or other shipping containers is recommended.

Waste Processing

Foam scrap, fabrication wastes and dust from foam fabrication operations may release vapor for an extended period of time. Do not store scrap and 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 and 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 allow 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 ventilations 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 and transporting foam scrap and waste.

Contact

For further questions please call 866-583-2583 (DuPont Contact Center) or visit [beyondblue.dupont.com](https://www.beyondblue.dupont.com).

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