

GacoInsulBarrier Spray Application Guide

Drum Storage

Store drums at 10°C to 38°C (50°F to 100°F).

Drum Prep

Prep drums to 15°C to 38°C (60°F to 100°F). In order for the drum to be serviceable (meaning ready to spray), the drum must be in a temperature range from which your reactor can take it the rest of the way to spray temperature.

Example: If your drum temperature is 80°F and you have an E-20 with a delta T of 50°F, your max spray temperature can only be 130°F. If you want to spray at 140°F with the same machine your drum must be 90°F to achieve that spray temperature. As you can see, it is important to know the delta T of your reactor and your drum temperature in order to achieve the proper spray temperature. For those of you with recirc capabilities, you can recirculate the 052N to raise the drum temperature but do not recirculate the chemical over 100°F.

Flushing

When changing from a closed cell product to GacoInsulBarrier, first purge the system with water to get the closed cell product out of the system, then come in behind with GacoInsulBarrier to flush out the water. Remember to flush the entire system including recirc lines, reactor and spray hose. Use water again to flush the GacoInsulBarrier out of the system before you go back to the closed cell product.

Spray Pressures

1,200 to 1,400 psi for optimal performance. 1200 psi is the minimum for a .01 mix chamber (AR4242) and 1400 psi is the minimum for a .02 mix chamber (AR5252). Look for good atomization and mix of chemical with a proper spray pattern.

Spray Temperatures

43°C to 66°C (110°F to 150°F). The lower temp spectrums are used in warmer climates and the higher temp spectrums are used in colder climates. If the foam is reacting slowly or is slightly runny down the wall then it is cold and requires more heat. If the foam starts to shrink after the initial reaction then it is too hot and temps need to be dialed down. For autumn and winter seasons a good starting point is 57°C (135°F).

Substrate Limitations

Substrates should be: clean, dry, and warm. While clean and dry offers the best success for adhesion, warmer substrates provide better yields. The colder the substrate the lower the yields we can expect.

Application Depths

Anything from a flash pass (1.7 cm or 0.5") to a full fill pass (8.9 cm to 14 cm or 3.5" to 5.5") in a cavity and depending on technique and cavity even thicker than 14 cm (5.5"). Keep in mind that the more passes you spray to fill a cavity the less yield you will get. While flash passes are not the most desired, they are sometimes necessary to heat substrates for the next thicker pass, or if spraying overhead so we can spray thicker passes above us.

Application Techniques

Most common: Holding the trigger and moving the gun from side to side while working from bottom to top of cavity. Other options: Triggering the gun in an up and down motion within the cavity; or, holding the trigger down, starting at the bottom and center of the cavity and taking the gun straight up to the top of the cavity. There are several different styles and techniques used by thousands of applicators. Regardless of your style, your job is to seal the cavity and fill to proper depth.

Inspect Application

Look for good cell structure and adhesion. Remove any unreacted chemical from wall (due to pressure imbalances while triggering gun). Press on cured foam and feel for voids, if voids are found inject foam into void.

EQUIPMENT SETTINGS

Pre-Heat - Iso (A):	43°C to 66°C (110°F to 150°F)
Pre-Heat - Poly (B):	43°C to 66°C (110°F to 150°F)
Hose Heat:	43°C to 66°C (110°F to 150°F)
Recommended Spray Pressure:	1,200 to 1,400 psi (dynamic)

REACTIVITY TIME

Cream Time:	0 - 1 sec
Rise Time:	3 - 4 sec
Tack Free Time:	3 - 4 sec
Cure Time:	4 hours