

Icynene Classic Ultra Select™ Best Practices

In order to properly process Icynene Classic Ultra Select™ and to maximize yield, please adhere to the following guidelines:

Storage:

- Once received, Classic Ultra Select™ drums should be stored at 60°F to 85°F.
- This will allow for quicker warm up of materials and will keep the B-side resin from degrading prematurely.
- Do not store material on rigs other than what is required for current application needs, as materials left inside of rigs can easily exceed these recommended storage temperatures.
- Classic Ultra Select™ B-side resin has a 6 month shelf life if stored as stated.
- Follow FIFO (First-In-First-Out) stock rotation.

Mixing:

- **Icynene Classic Ultra Select™ resin requires mixing at the beginning of each day and when starting a new set. Conduct mixing at the jobsite just before application.**
- Mix with Icynene Draw mixer (Graco part #26C150) on high speed for 30 minutes. Do not recirculate until material is mixed. Installers can begin to recirculate product through the reactor with heat off or under 100°F, after mixing for the first 15 minutes
 - Ensure the mixer blades are spinning counter-clockwise. If they are spinning clockwise, interchange the installation of the airline and the muffler to reverse the direction to counter-clockwise.
 - Air line needs to be connected to the Draw mixer and turned on slightly before tightening to the Drum lid so the blades on the shaft are spinning. Otherwise they will make contact with the bottom of the barrel and the draw mixer will not be able to be screwed into the lid of the drum. Also angled adapters are not needed with three hole drum lids.
- After 30 minutes reduce mixer speed to medium for constant agitation of the mixed drum while spraying.
- If you do not have the Icynene Draw mixer, or if the mixer fails to operate, mix the resin with a **clean** aluminum canoe type paddle for 5 to 10 minutes depending on the age of the resin. If the resin is one month of age or older a minimum of 10 minutes of hand mixing is required.
 - Paddle mixing should be conducted by pulling material from the bottom to the top of the drum in a circular motion. It is important to mix until the material is thoroughly consistent (check the paddle when you pull it out of the drum for consistent appearance).
 - Once hand mix is complete, a drum mixer run at medium speed must be used for constant agitation of the mixed drum while spraying.

Heating:

- After mixing you can start spraying Classic Ultra Select™ with drum temperatures as low as 70°F.

Best Practices & Guide



- For improved yield, it is recommended to warm the material in the drums. The ideal drum temperature for processing Icyne Classic Ultra Select™ (B-side Resin and A-side Iso) is 80°F.
- If necessary in cooler weather and while mixing, the proportioner if equipped with circulation lines, can be used to warm up the drums to 80°F by circulating through the machine back to the drums. The machine heaters should be set no higher than 110°F during this operation.
- If not equipped with a circulation system, drum band heaters or electrically heated drum blankets can be used to warm and maintain the drum temperatures at 80°F. Non-heated drum blankets can be used with a circulation system to maintain drum temperatures at 80°F. In all cases be careful not to overheat the drums (over 90°F).
- Drum temperatures in excess of 90°F may decrease performance and produce cosmetic defects within the foam structure and surface.
- If you have a hose circulation block, it is also good practice to circulate the hose for about 10 minutes before spraying Classic Ultra Select™.

Processing Temperature and Pressure:

- In standard ambient conditions of 60°F to 85°F Icyne recommends the following for processing Classic Ultra™:

Drum Temperatures: 80°F
A and B Primary Heaters: 128°F to 135°F
Hose Heat: 128°F to 135°F
Mix Chamber: AR5252 (02 round)
Pressure: 1200 psi (dynamic)
Spray Distance: 12" to 14"

- Ideally the foam should stop rising in about 5 to 6 seconds.
- In cold weather (below 60°F) increase the A, B and Hose heats in 3 degree increments (up to 150°F) to achieve this rise time.
- In hot weather (above 85°F) decrease the A, B and Hose heats in 3 degree increments (down to 120°F) to achieve this rise time.
- To maximize yield Icyne recommends using an AR5252 (02 round) at 1200 psi dynamic pressure. If it is necessary to use another sized chamber, use the following guidelines:

<u>Mix Chamber Size</u>	<u>Pressure (dynamic)</u>	<u>Distance</u>
00 (2929)	700-900 psi	10" - 12"
01 (4242)	900-1100 psi	12" - 14"
02 (5252)	1100-1350 psi	12" - 14"
03 (6060)	1350-1500 psi	14" - 17"

Best Practices & Guide



Please be aware that altering recommended settings may cause poor foam quality and a substantial reduction in yield.

Spray Technique:

- Always spray with the spray gun at a 90 degree angle to the substrate.
- Maintain the proper distance as recommended above.
- For wall cavities, spray side-to-side from the bottom of the bay to the top while wetting the studs all the way up.
- If spraying a flat wall, maintain gun angle and distance. Don't spray more than 2ft wide. If necessary, create "foam studs" 2ft apart as a guide.
- **Spray the full thickness required in one single pass. Spraying in layers or excessive touch-up work will lead to a reduction in yield.**
- When applying the material in more than one pass, 15 minutes is recommended between passes.

Changeover:

- **If you are changing in to Classic Ultra Select™ from another product you must not allow the other product to contaminate the Classic Ultra Select™ resin drum.**
- After mixing the Classic Ultra Select™ resin as outlined above do the following:
 - **Make sure the drum mixer, dip tubes, drum pump and pump housing are completely free of the previous resin.**
 - Allow some air in to the drum pump or dip tube.
 - Put the drum pump in to the drum of Classic Ultra Select™ resin
 - If you have a re-circulation/pressure-relief line, pump the contents to the previous drum or into a waste container with the transfer pumps.
 - Connect the re-circulation/pressure relief line to the Classic Ultra Select™ drum lid.
 - Remove the gun from the hose manifold and pump the hose contents in to the previous drum until you see a color change or until you reach the air pocket in the line.
 - Keep the hose heat on at 125°F during changeover.
 - There will be some mixture of the two resins in the line which you can run in to a container for disposal or spray out as foam for disposal.
 - Spray a test bun and watch for good foam with no collapse.
- Make sure recommended settings above are followed before installing Classic Ultra Select™ as outlined above.

Before spraying Icynene Classic Ultra Select™ for the first time you should contact Icynene-Lapolla Technical Services for installation guidance.

Revision Date: 7/22/2019

Houston | Corporate Office
15402 Vantage Parkway East, Suite 322
Houston, TX 77032
Phone: (281) 219-4100 Fax: (281) 219-4102
icynene-lapolla.com

Mississauga
6747 Campobello Road, Mississauga
Ontario, Canada L5N 2L7
Phone: 1-800-758-7325