

TechTip G2 – Maintaining Temperatures

Let's face it – you spent a lot of money for the material in those drums. And it can make you a lot of money as well, if you treat it properly. There are two extremes of temperature that you face in the field:

- The bitter COLD that you see at the beginning or end of the spray season; and
- Those really HOT days of mid to late summer (the rest of the time it is more or less pleasant).

Because of these changes in climate, many system houses offer formulations specially modified for the season:

- Regular for most of the season;
- **Summer** for those very HOT days
- Winter for the colder days of the year to get you going earlier and keep you going later in the spray season.

There are things you need to do to protect that investment especially in the extremes of the season: FIRST RULE: ALWAYS SEEK THE ADVICE OF YOUR SYSTEM SUPPLIER FOR OPTIMAL MATERIAL STORAGE AND USE TEMPERATURES FOR THE SYSTEM YOU ARE USING!

WINTER – maintain your drums in a warm area away from cold drafts

FREEZING - Protect the material from freezing which could happen in shipping, storage, or in the field.

This may not mean 32°F but could happen 10-15°F above or below that. The formulation may **separate** with freezing causing a disaster on your jobsite. If you suspect frozen material – place it in a warm holding room *between 80-100°F for a day and then tumble or roll drums to re-mix contents. Do not open before this tumbling.

VISCOSITY DRIFT - Every 10 °C (18°F) drop in temperature will double viscosity!

If your B-side viscosity is 700 cps at 77F, it will quickly thicken with temperature drop. This change in temper-ature will thicken your system, stall your pumps, and throw you **off-ratio!**Low heat flux blanket-type heaters work well to maintain drum temperatures. Avoid use of band-type heaters or other high heat flux heaters. Check with your SPF and equipment manufacturer before using on specific SPF systems.

С	F	B-side	A-side
25	77	700 cps	200 cps
15	59	1400	400
5	41	2800	800



ABOUT THE SPRAY POLYURETHANE FOAM ALLIANCE (SPFA)

Founded in 1987, the Spray Polyurethane Foam Alliance (SPFA) is the voice, educational and technical resource, for the spray polyurethane foam industry. A 501(c)6 trade association, the alliance is composed of contractors; manufacturers and distributors of polyurethane foam, related equipment and protective coatings; and consultants who provide inspections and other services. The organization supports the best practices and the growth of the industry through several core initiatives, which include educational programs and events, the SPFA Professional Installer Certification Program, technical literature and guidelines, legislative advocacy, research, and networking opportunities. For more information, please use the contact information and links provided in this document. www.sprayfoam.org

DISCLAIMER

THIS DOCUMENT WAS DEVELOPED TO AID CONTRACTORS AND INSTALLERS IN THE PROPER APPLICATION OF SPRAY-APPLIED POLYURETHANE FOAM SYSTEMS. THE INFORMATION PROVIDED HEREIN, BASED ON CURRENT CUSTOMS AND PRACTICES OF THE TRADE, IS OFFERED IN GOOD FAITH AND BELIEVED TO BE TRUE TO THE BEST OF SPFA'S KNOWLEDGE AND BELIEF.

THIS DOCUMENT IS MADE AVAILABLE "AS IS" AND WITHOUT WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, AND NON-INFRINGEMENT. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, SPFA, ITS OFFICERS, DIRECTORS, EMPLOYEES, AUTHORIZED AGENTS AND VOLUNTEERS DISCLAIM ANY AND ALL LIABILITY OR RESPONSIBILITY FOR ANY LOSSES, DAMAGES, COSTS AND/OR INJURIES OF ANY KIND OR NATURE ARISING OUT OF OR RESULTING FROM THE USE AND/OR RELIANCE UPON THE CONTENTS OF THIS DOCUMENT.

DOCUMENT HISTORY

Date	Sections Modified	Description of Changes
2010	New Document	
January 2021	New Format	New TechTip Format