TECHNICAL BULLETIN

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1.7 Closed-Cell Frothing Explanation

Dear RIS Team,

Over the past few weeks we've received several queries regarding the stability or boiling point of UPC's 1.7 closed-cell foam. These concerns have been raised after customers noticed the 1.7 "hisses" under more pressure than what is expected when the B-side drum cap is removed. One customer even called after the B-side chemical began frothing out of the drum while spraying. In that particular instance the customer placed a portable generator very close to the drum and the exhaust heat literally boiled the chemical. In either case, it is important to note that the 1.7 is more sensitive to excess blowing agent boiling off and potential frothing.

Like many closed-cell foams, the 1.7 resin utilizes a 245fa blowing agent. Blowing agents are used to create cellular structure - small bubbles that create the stability and thermal resistance. 245fa is liquid that begins to boil above 60ºF, at which point slowly turns into gas, thereby forming pressure inside the headspace of the drum.

The 1.7 formula is an iteration of the classic 2.0 closed-cell product, with the main difference being the 1.7 has more blowing agent. This allows the 1.7 to achieve a lighter density and greater yield. More blowing agent means a greater quantity of gas forms when the blowing agent reaches boiling point and leaches out of the liquid. Therefore, the additional gas buildup at the top of the drum is nothing to be alarmed about, particularly in warm weather, and will have an insignificant impact on overall yield.

As a reminder, never recirculate closed-cell foam, always keep stored in a tempered environment below 80ºF and in an air-conditioned Rig in the summertime.

Sincerely,

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