

# FLAMMABILITY OF URETHANE FOAM DEMANDS SAFETY PRECAUTIONS

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Urethane foam does not flame up rapidly when it is exposed to a relatively low-heat flame, such as from a match. In such cases, the smoldering or minor flame in the foam itself can be easily snuffed out. Such a reaction should not be interpreted to mean that urethane foam represents only a minor fire hazard, however. On the contrary, it is extremely combustible once its flash point is reached. When that happens, the spread of flame across whatever foam is exposed is so rapid that it's almost like throwing a match into a puddle of gasoline.

A coating of so-called "fire-proofing" that can be applied across the exposed urethane walls in a CA room may raise the ignition point of the foam so it adds some protection in

that regard. However, the foam still has a flash point that is not significantly altered; so if that is reached, "fireproofed" foam will flame up as readily as untreated foam.

The only true fireproofing is a physical barrier between the foam and potential sources of ignition. A plastics-industry publication recommends a covering of "at least 1/2 inch of cement plaster or fire-rated gypsum wallboard or an equivalent barrier providing a finish fire rating of 15 minutes or more."

An increased degree of protection against fire is one of the advantages of the "inside-outside" type of CA-room construction now recommended for many CA-storage opera-

tors. The foam is applied between the interior walls of the CA room and the exterior walls of the structure, sandwich-style. Thus the foam is not exposed to any potential source of combustion, either from inside the CA room or from the outside.

It's good to remember, that the melting point of solder is higher than the flash point of urethane, so using a torch for that purpose is an open invitation to trouble.

A bulletin from the Urethane Safety Group of the Society of the Plastics Industry, Inc., summarizes the kinds of activi-

ties that should be avoided around exposed urethane: "Prohibit open flames; cutting and welding torches; electric heaters; high intensity lamps; and smoking materials such as pipes, cigars and cigarettes, from foam storage and installation areas. If hot work must be done near exposed urethane, shield the foam from heat and sparks by a thermal barrier such as 1/2 inch cement asbestos boards. A fire watch is desirable. Do not weld or cut metal which is in contact with urethane."