



Insurance Loss Control Consultants, Inc.

**WHAT EVERY INSURER AND
SAFETY EXPERT SHOULD KNOW ABOUT
FIRE RETARDANTS**

In an era of rapidly evolving technology, the fire science field and the insurance industry have collectively witnessed disturbing trends in commercial and residential construction which have progressively expanded, legitimized, and incorporated the use of both synthetic and light weight organic materials in contemporary building design. These materials represent unique challenges to fire science and insurance professionals committed to life safety and property preservation.

Historically, fire science has responded through modifications of existing automatic sprinkler technology, isolation and segregation of exposures to limit loss potential, and improved detection capability of protective signaling systems.

Unfortunately, these efforts are reactionary and fail to address the rudimentary issues of prevention. Fire behaviorists, insurance underwriters, and loss control specialists have, therefore, focused renewed attention on the use of fire retardants as a viable method to stimulate and encourage a proactive environment based on preventative principles.

A myriad of fire protection codes, ordinances, and laws currently govern and regulate commercial buildings and multiple unit residential facilities. While history is rife with examples of catastrophic fire losses, statistics glaringly illustrate the majority of injuries and fatalities occur in home fires. It was reported in a recently published study by the Federal Emergency Management Agency that fires in residences were the leading cause of death from 1989 to 1999 for children aged four and younger in 13 States, and the District of Columbia. The study analyzed figures from 1989 thru 1998, finding 35,376 people had died in fires during that time, 5,712 of them children. Nationally, fire is the third leading cause of death for young children.

These figures are disconcerting, particularly as effective residential fire retardants are introduced and available to the general public. One such fire retardant, No-Burn, produces a family of products formulated specifically to protect combustible building materials, interior finishes, furniture, and fabric. Usable on any surface, manually or mechanically applied, No-Burn is non-toxic and non-carcinogenic, making it safe to use anywhere in the home. When subjected to recognized testing protocol, No-Burn, upon the application of intense heat or flame, produces carbon char, nitrogen and carbon dioxide. Carbon char acts as a heat barrier, and nitrogen and carbon dioxide are both inert, cryogenic gasses. Carbon dioxide has a long history of use as an effective extinguishing agent. By eliminating, through separation, the fuel that fires require, materials treated with No-Burn do not support combustion or contribute to flame spread. It will also reduce smoke development by 90%, a critical factor considering that smoke or the products of combustion are the primary cause of fire fatalities.

The alarming statistics that quantify the levels of fire fatalities, injuries, and property damage, cannot be understated or marginalized. It is the duty of the fire science community to recommend and encourage use of fire retardant products such as No-Burn. It is also incumbent upon the insurance industry to recognize the benefits of this generation of products through the use of appropriate premium credits and discounts. Failure to do so is not only unacceptable, but also a disservice to the general public, and possibly an abdication of ethical responsibility.

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