

Keeping Fire and Life Safety In Mind at All Times

While *Sprinkler Age* is not a publication on the “must read” list of industrial packaging manufacturers and fillers, an article in the August 2014 issue is one you should take the time to read – as well as consider in evaluating your firm’s future packaging requirements!

The article, written by two professionals who have dealt intimately with the challenges of risk and loss prevention, focuses on the growing popularity of composite intermediate bulk containers (IBCs) for the transportation and storage of liquids, including those classified as flammable and combustible. IBCs are often viewed as providing economies of scale when transporting large quantities of liquid products, especially when compared to other non-bulk packaging. However, what fillers often overlook in choosing IBCs is the significant risk posed by using such packaging for flammable and combustible liquids. While federal regulations allow such products to be shipped in IBCs, storing them in a warehouse or distribution center is not permitted, except under certain protection schemes.

The authors of the *Sprinkler Age* article share their extensive experience in this area from their long and distinguished careers. They address head-on the contradictions between federal transportation regulations, many state and local fire

codes, and Occupational Health and Safety Administration (OSHA) requirements, as they relate to the transportation and storage of flammable and combustible liquids in IBCs.

The Bottom Line:

- Under current federal hazardous materials transportation regulations (49 CFR Parts 100-185), flammable and combustible liquids may be shipped in IBCs;
- Under existing state and local fire codes that adhere to the National Fire Protection Association’s NFPA 30 guidelines, as well as the OSHA standard, indoor storage of flammable and combustible liquids in composite IBCs is only allowed under specific, limited conditions;
- So-called “listed” composite IBCs are those that have met stringent testing by Underwriters Laboratories (UL 2368) or FM Approvals Standard 6020. IBCs so designated are commercially available, but not widely used;
- NFPA 30 provides design requirements for limited palletized storage of combustible liquids under certain conditions, namely stacked four-high in relieving-style steel drums in a warehouse protected by an appropriate fire suppression system;
- There are *no options* for protected storage of non-listed composite IBCs. Such packagings must be treated as unprotected storage in limited quantities.

While the *Sprinkler Age* article is targeted to fire service and fire code officials, the liability implications for those firms filling and shipping flammable and combustible liquids in composite IBCs should be obvious: these packagings can fail quickly during fire exposure adding a large amount of additional fuel to an existing fire.



Ask your steel drum supplier for a copy
of the full *Sprinkler Age* article.