

Storage of Consumer Fireworks

Finished “Consumer” fireworks, because of the limited amount of pyrotechnic composition permitted in each individual unit, will not mass explode in a fire situation. They will merely burn at a controlled rate, and the fire can be fought by conventional methods.

All consumer fireworks (Explosives 1.4G) offered for sale in the United States have been tested for stability by the Bureau of Explosives and approved for transportation by the U.S. Department of Transportation. Consumer fireworks are stable devices, they will not spontaneously ignite during storage if kept reasonably cool and dry.

In recognition of the non-explosive nature of consumer fireworks, the Bureau of Alcohol, Tobacco and Firearms--the Federal agency responsible for licensing and storage of explosives--has specifically exempted consumer fireworks from the storage provisions of their regulations.

Tests conducted by the U.S. Department of Transportation in 1983 showed that a fire involving stored consumer fireworks will burn, but not produce a mass explosion. Two shipping containers filled with common fireworks were burned; the test report stated:

“ The fireworks in both containers were consumed inside of, or in close proximity to, the container test sites. There was little danger to personnel and property since fireworks were not expelled great distances from the container.”

Such a fire could be fought using standard protective equipment, and the spread of the fire could be minimized by the application of water. The tests further demonstrated that great separation distances are not required when consumer fireworks--packaged, finished form--are stored in a warehouse. Similarly, consumer fireworks stored in a typical retail sales location do not pose a fire hazard different from that of other combustible materials.

Reference for, additional information on the burn tests: National Fire Protection Association *Fire Journal*, Volume 80, Number 5 (September 1986)

In December 1991, the U.S. Department of Transportation revised its Hazardous Materials Regulations based on the U.N. Recommendations on the Transport of Dangerous Goods. Under the current DOT Classification, common fireworks, formerly described as “Class C” explosives, are now described as Fireworks, UN 0336 and classified as Explosives 1.4G.

Information courtesy of the American Pyrotechnics Association