

IME

institute of makers of explosives

Shelf Life of Explosive Materials

Many of the current regulations governing the storage and handling of explosive materials were adopted and implemented before the development of modern blasting agents, emulsions, slurries, water gels and cast boosters. These regulations often do not reflect the refinements in product ingredients or the improvement in manufacturing techniques that have been made in explosive technology in recent years.

The majority of modern explosive materials no longer contain high percentages of explosive oils which may exude as the products age causing them to become more sensitive and/or less stable.

Additionally, other newer explosive materials contain inhibitors and/or stabilizers that lengthen the shelf life of the products. Some explosive products now contain TNT, Composition "B", Pentolite, Tetryl, RDX, PETN and other military type explosives which are extremely stable over a wide range of conditions for a long period of time. Many of these products have virtually unlimited shelf life.

Since explosive manufacturers want their products to function at full efficiency, they advise distributors and/or consumers regarding the shelf life of the products and make recommendations as to proper use and application.

Due to the diversity of the products manufactured by its member companies, IME does not feel that any one shelf life standard can, or should be applied, to all explosive materials. In keeping with current practices, IME recommends "Always store explosive materials so that corresponding grades, brands, sizes and "Date-Plant-Shift" codes are together and rotate stocks so the oldest material in the magazine is used first. Consult with the manufacturer to assure that accepted practices for the use and storage of explosive materials are being followed."

Approved by the IME Board of Governors December 7, 1988