Explosive Materials

Composition C4 (Plastic Explosives)

The U.S. military primarily uses composition C4 (Plastic Explosives). The most common configuration is the M112 block demolition charges that consists of 1.25-pounds of Composition C4 packed in a Mylar-film container with a pressure-sensitive adhesive tape on one surface. A removable paper cover protects the tape. In blocks of recent manufacture, Composition C4 is white and packed in an olive drab, Mylar-film container. The adhesive backing allows the charge to be attached to any relatively flat, clean, or dry surface.



Figure 1-55. Composition C4 M112 Block Demolition Charge

The M112 block demolition charge can be cut and molded to fit irregularly shaped targets while being easily attached to the target. The explosives are poisonous and dangerous if chewed or ingested; their detonation or burning produces poisonous fumes.



Figure 1-56. Composition C4 M112 Container

Detasheet® (Flex-X)/Primasheet®

These are flexible, waterproof demolition charge sheets that are insensitive to shock, easy to cut and attach to any item. They are found in a variety of forms.

Detasheet® is sold commercially, may range from pink to brownish-red in color, and contains PETN, HMX or RDX. It is a flexible explosive that comes in many forms, the most common being the flat, uniform sheet.

Flex-X is used by the military and is olive green in color. It can be found in either a sheet (M118) or in a roll (M186). The M118 is identical to the M186 except that it comes in a sheet. The M186 is a 50-foot roll explosive rolled on a plastic spool. It is approximately 3 inches wide by ¼ inch deep. The sheet has pressure sensitive adhesive tape attached to one surface. Every foot of Flex-X provides approximately ½ pound of explosive, containing either PETN or RDX. The exact explosives contained vary with manufacturer. Newer manufactured charges may include still other explosives.



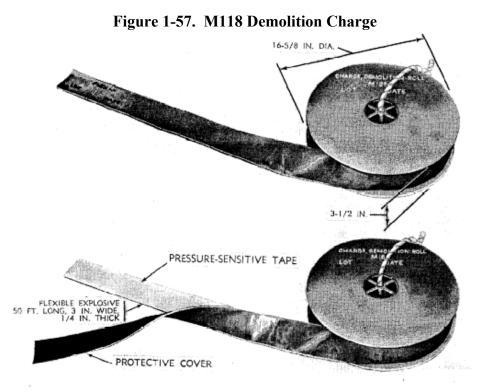


Figure 1-58. M186 Demolition Charge Roll

Primasheet® is an olive drab waterproof PETN or RDX based flexible putty-like explosive that comes in sheets, cords, and extruded shapes. It can be easily cut into any shape and applied with an adhesive to a target or used to improvise linear shape charges. Primasheet® is stable, but accidental detonation can occur if it is improperly handled. It is sensitive to heat, shock, friction, impact, or static charge. It is used in the railroad industry or in general demolition work.

Dynamite (M1)

Military dynamite is an RDX-based composite explosive that does not contain nitroglycerin. It is packed in $\frac{1}{2}$ -pound, paraffin-coated, cylindrical paper cartridges that have a nominal diameter of 1- $\frac{1}{4}$ inches and a length of 8 inches



Figure 1-59. M1 Military Dynamite

TNT Demolition Charge

TNT block demolition charges are issued in three sizes. The ¹/₄ -pound block demolition charge is in a cylindrical waterproof cardboard container and the ¹/₂-pound and 1pound block demolition charges are in rectangular waterproof cardboard containers. All three have metal ends with a threaded cap well in one end. TNT (trinitrotoluene) charges have a high detonating velocity and thus TNT is particularly well suited to cutting or breaching hard surface material.

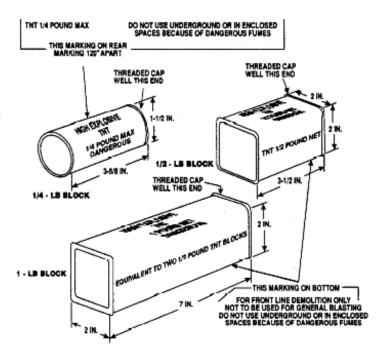


Figure 1-60. TNT Demolition Charge, ¹/₄, ¹/₂, and 1-Pound Charges



Figure 1-61. TNT Demolition Charge, ¹/₄, ¹/₂, and 1-Pound Charges

NOTE: The color of the container may vary depending on the age of the materials or long exposure to inclement weather conditions.