MILITARY MEDIA INC.

FOR INFORMATIONAL & STUDY PURPOSES ONLY! DO NOT ATTEMPT TO MAKE THIS EXPLOSIVE. THIS CD IS FOR READING ENJOYMENT ONLY. MAKING THIS EXPLOSIVE COULD <u>INJURE OR KILL YOU</u>. THIS CD IS <u>NOT</u> INTENDED AS A RECIPE BOOK.

PETN

PETN is a high explosive used in detonating that is one of the most powerful military explosives, almost equal in force to nitroglycerine and RDX. When used in a detonating cord, it has a detonation velocity of 21,000 feet per second and is relatively insensitive to friction and shock from handling and transportation.

PREPARATION:

Four hundred cc. of strong white nitric acid-prepared by adding a little urea to fuming nitric acid, warming, and blowing dry air through it until it is completely decolorized-is cooled in a 600 cc. beaker in a freezing mixture of ice and salt. One hundred grams of pentaerythrite, ground to pass a 50-mesh sieve, is added to the acid a little at a time with efficient stirring while the temperature is kept below 5 degrees. After all has been added, the stirring and the cooling are continued for 15 minutes. The mixture is then drowned in about 4 liters of cracked ice and water. The crude product, amounting to about 221 grams or 95% of the theory, is filtered off, washed free from acid, digested for an hour with a liter of hot 0.5% sodium carbonate solution, again filtered off and washed, dried, and finally re-crystallized from acetone. A good commercial sample of PETN melts at 138.0-138.5 degrees. The pure material melts at 140.5-141.0 degrees.