I created two separate blasting caps from 2 polished brass .223 Remington shell cases. Each shell was filled to the neck and compacted with 2 kg worth of carefully applied pressure via compression tamp rod. It was an even amount of both substances in both cases.



The products tested were "cold formed" white crystalline acetone peroxide and what was assumed to be yellow diphorone penta peroxide. A plastic sleeve was fitted around the top to hold in the *thermalite* "slow lent" fuse and then duct taped to insure adequate compression.



I placed the acetone peroxide-blasting cap into concrete block that was padded with low density Styrofoam. The blasting cap sat vertically with primer base on top of 2.5mm primed steel shelf plating.



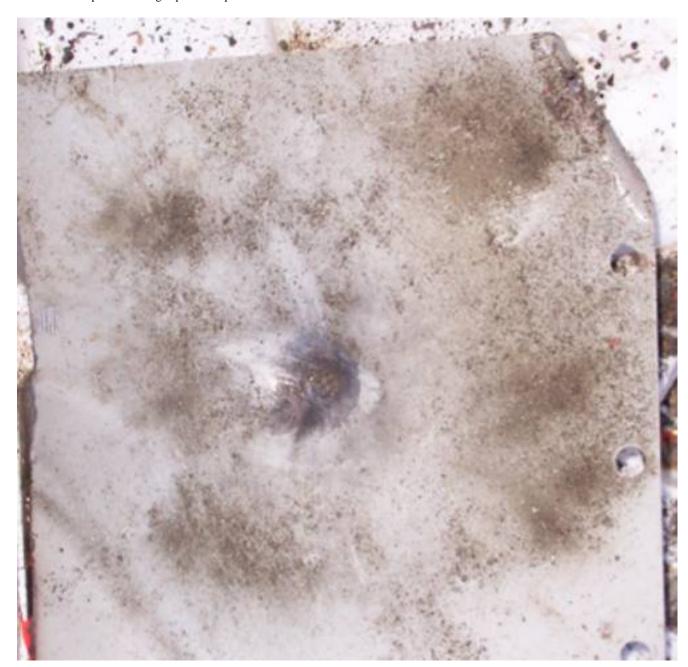
I ignited the fuse pyrotechnically and retreated to a safe distance. A loud smoke filled detonation followed several seconds later. After examining the damage done to the plate I noticed a small indentation where the blasting cap had sat. I could see the rim and the primer housing. The primer had been ejected and the case had fragmented into retrievable twisted chunks of brass as shown below.



Next came the test of the diphorone penta peroxide-blasting cap. Again the blasting cap was ignited pyrotechnically. The explosion was intense and destroyed the brick housing. There was no smoke upon detonation. From the image below you can see the larger indentation clearly visible from the picture below.



Here is a close up of the steel plate with the second blast indentation. The brass casing has denigrated into extremely small razor sharp pieces.



The picture below shows the difference between the two blasting caps. The same amount of each explosive in my opinion have given me a clear picture which substance has a higher detonation velocity due to the indentation size and the fragmentation of the rifle cartridge casing.

