Tannerite Exploding Targets How can this stuff be legal?

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Some time ago I read a Law Enforcement Sensitive article by Detective Ryan DeNucci of the Barron County Sheriff's Department about an explosion in their jurisdiction in 2005. In this explosion, a male subject blew up a vehicle with a substance called Tannerite, a binary explosive sold as an exploding target for shooting. Detective DeNucci described how the male mixed eight bottles of the Tannerite, placed the mixture in an Oxi-Clean jug, suspended it in a vehicle in a remote area, and shot the substance with a .300 Winchester Magnum round causing an explosion that blew the vehicle apart.

After reading the article I did not think much of the incident until someone again sent me the article along with information on how to order Tannerite. I became curious how an explosive that appeared to demonstrate the qualities of a high explosive could be ordered over the Internet! I viewed the Internet site and read the testimonials of customers and watched videos of Tannerite being used. In one testimonial, a person who identified himself as Paul L Marshall, a Chemical Engineer with 30 years of explosive experience, states that in his opinion, "This is one of the most fantastic explosive mixtures I have ever seen or tested. Tannerite detonates between 5000 and 7000 meters per second." (this would be over 16000 to 22000 feet per second). I believed the claims I was reading were advertising hype, but I decided to order some Tannerite and experiment with it under different explosive situations to determine if it, indeed, reacted like a high explosive.

Tannerite is described on the Tannerite website as a binary explosive that, sold in its unmixed form, is non-hazardous and can be shipped without expensive hazmat fees. Tannerite is further described in their webpage as legal in all 50 states, no license of any sort is required and is exempt from the Code of Federal Regulation storage requirements as long as the person who possesses the Tannerite does not mix and store the ingredients. The website states that the BATFE does not consider them an explosive target, but rather a reactive target. I checked the United States Consumer Product Safety Commission website and found an article which states, "In a separate case, the owner of Skylight High Explosives Company and Tannerite Company has entered into a consent decree. Daniel Tanner, of Pleasant Hill, Ore., has agreed to stop selling the chemicals and components used to make illegal fireworks, such as M-80s and quarter-sticks. The consent decree does not prohibit Mr. Tanner from selling Tannerite Targets."

I received my shipment in less than a week for about $50.00. The shipment contained six 8 oz. bottles of what appeared to be ammonium nitrate prills, a small container labeled as the Tannerite catalyst of Zironium Based ZRH, a mixing container, a funnel, a small teaspoon measuring spoon, and a DVD video of the Tannerite in use and mixing directions.

I watched the training video where the company shows the Tannerite in use and their claims that it is impossible to initiate the Tannerite with a pistol caliber firearm, a .22 LR, burning the substance with a propane torch or by placing a fuse into the Tannerite.

When I mixed and shot an 8 oz. bottle of Tannerite with a high powered rifle, the Tannerite exploded with a loud report, giving off a large amount of white smoke. It reacted as the company website claimed.

I next tested the Tannerite to see if it could be initiated with a standard shock tube #8 blasting cap and to get an idea of how much explosive force a single 8 oz. bottle had. I mixed the Tannerite as directed, placed the blasting cap in a hole I made in the top of the bottle and placed the bottle in the jaws of a large metal vise. I tightened the vise only enough to hold the bottle in place. When initiated, I was surprised by the force of the explosion. The rear jaw of the vise broke off and flew about 30 feet from the explosion. This portion of the jaw which I weighed later, was over seven pounds. The other part of the vice jaw was cracked and the metal carrier for the jaw was dented. I could not believe the explosive power the Tannerite exhibited. Now more than ever I wanted to continue my testing with the Tannerite.

My next test was to shoot an 8 oz. bottle of Tannerite mixture with a .223 rifle while the bottle was mounted against a building. On our next Area Unit training day, the Placer County Bomb Squad had obtained the use of an old home with barns on 109 acres for our training scenarios. The 8 oz. bottle of Tannerite was mounted against the door of an old building. When shot, the explosion blew out a section of the building's door, which was constructed of ½ inch tongue and grove wood and a 4 X 4 post that the door closed against. In the third test, a non-el #8 blasting cap was used to initiate the 8 oz. bottle of Tannerite in a vehicle. The bottle was placed half way under the driver's seat and initiated with the blasting cap. The blast blew a hole in the floorboard of the vehicle that was approximately five inches in diameter and knocked the front seat backward.

My final test was to see if I could initiate the Tannerite with something more available to the average person on the street. I took an "M-type" cardboard tube destructive device and attached it to the side of an 8 oz. container of Tannerite. When the cardboard tube device was initiated using an electric match, it initiated the Tannerite. My simple experiments clearly showed the Tannerite mixture could be initiated and exploded by methods other than shooting it with a rifle.

I checked for additional information regarding Tannerite explosions on the Internet and found several entries on www.YouTube.com. On that website, several individuals show videos and talk about using Tannerite to blow up cars, washing

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machines and other items. Their videos also show them launching a car wheel and tire into the air with what they claim is Tannerite. Additionally, there are blogs on the Internet where individuals talk about Tannerite and their fear of the substance becoming illegal to purchase. On one blog they talked about getting a bunch of people together to purchase 200 pounds of Tannerite to see how big of an explosion they could produce.

After my experiments with the explosions and Internet investigations, I became concerned with the ability of an Internet manufacturer to sell and ship this substance to anyone who could pay the bill. Tannerite's claim that "TANNERITE is STILL 100% legal in all states!" appears to me that even the company cannot believe the product is not regulated as an explosive. In talking to other Bomb Techs in our area unit, we were all in agreement that California law would make it a felony for someone to mix the Tannerite and use it in any manner without possessing a blasters license. I contacted our local BATFE office to see if I was missing something in the Federal Law that allowed Tannerite to be sold and shipped throughout the United States.

BATFE advised me that they have been aware of Tannerite for approximately five years. I was told that Tannerite, basically a mixture of ammonium nitrate and aluminum (ANAL) was not considered an explosive until mixed, and since Tannerite shipped the materials unmixed, they were not violating any federal law. I was also advised that BATFE had conducted tests on Tannerite and found that it showed a relative explosive factor of 0.8 to TNT. I was told that there is no Federal Law to regulate a product such as Tannerite. BATFE also advised me that other binary explosives also fit into this category and could legally be sold to anyone as long as the ingredients had not been mixed. I was told that the company that manufactures Kinepak, policed themselves and refused to sell their product to just anyone.

Just to test this, I called SEC, Inc. to see if I could purchase Kinepak and what the company required. I was advised that I needed an ATF license to make the purchase. When I advised I was with a Law Enforcement Agency, I was still advised that they required an ATF License. When I inquired further, I was advised that the Company was familiar with Federal Law regarding binary explosives, but their Company policy was to require an ATF license.

I looked into Congressional action on this subject and found that on June 30, 2005, several House of Representatives' members from Pennsylvania, Ohio, Mississippi and New York introduced bill H.R. 3197 that would authorize the Secretary of Homeland Security to regulate the production, storage, sale and distribution of ammonium nitrate. At the time there was a push to pass the bill due to an incident in which 17 Canadians were attempting to acquire three tons of ammonium nitrate to attack various targets. In the last action from June of 2006, the bill was ordered to be reported. Now I don't know what "ordered to be reported" means, but in researching legislation in Congress, it's apparent that numerous proposed bills are "ordered to be reported" and nothing else happens on them. I attempted to contact my Congressman regarding this subject, but never received a call back.

I believe explosives mixtures like Tannerite should be regulated and treated as any other type of high explosive mixture. This mixture should not be available to anyone who has the money to buy it over the Internet. I was also advised that at the Reno, Nevada gun show, several vendors were selling Tannerite over the counter. I would like any input from anyone else who has had dealings with Tannerite or ideas on how to write legislation regarding substances such as Tannerite. Send any emails to dpass@sacsheriff.com.