



## Testing of Narc-Gone MX

One of the important characteristics of the Narc-Gone MX system that differentiates it from other chemical drug disposal systems is the fact that we have worked with a certified forensic laboratory to prove the amount of reduction for various drugs.

As an example, here are the results of some recent testing.

### Method

We were working with the North Carolina State Crime Laboratory that had large quantities of illicit drugs in their evidence room. On August 29, 2022, the Crime Laboratory placed 5.3 grams of Fentanyl in a 16-ounce Narc-Gone bottle. The same laboratory placed 6.91 grams of Ketamine in a second 16-ounce bottle. The bottles were transported to the forensic laboratory in Arlington, Texas for analysis.

The forensic laboratory received the bottles on September 6, 2022, nine days after the drugs were placed in the bottles. The bottles were stored at room temperature at the forensic laboratory until they were tested on September 12, 2022, 15 days after the drugs were placed in the bottles. A qualitative screen showed that both of the bottles still had detectable drug in the fluid, so the forensic laboratory did a semi-quantitative estimation of the drug level in the fluid. The qualitative screen is extremely sensitive and can detect drugs in the parts-per-million (PPM) range. After further review of the containers, it was identified that the crime lab had placed the drugs in the containers while still in their evidence bags. Per our instructions for effective drug destruction, we require all drugs to be removed from their outer wrappings.

After the drugs were removed from their outer wrappings inside the containers, we had the forensic laboratory repeat the qualitative screen on September 29, 2022, 31 days after the drugs were placed in the bottles, and there was still detectable drug in both bottles, so once again, the forensic laboratory did a semi-quantitative estimation of the drug level in the fluid.

### Results

The first bottle contained 27,890 PPM of Fentanyl at the time the Crime Laboratory put the drug into the bottle. Fifteen days later the drug was still detectable, but the semi-quantitative value was 15 PPM, a reduction of Fentanyl concentration of 99.95%. This was the result even when the drugs remained in their outer wrapping. When the outer wrapping was removed the bottle was tested sixteen days later, the level was 4 PPM, a reduction of Fentanyl concentration of more than **99.99%**.



The second bottle contained 36,368 PPM of Ketamine at the time the Crime Laboratory put the drug into the bottle. Fifteen days later the drug was still detectable, but the semi-quantitative value was 4,900 PPM, a reduction of Ketamine concentration of 86.53%. This was the result even when the drugs remained in their outer wrapping. When the outer wrapping was removed and the bottle was tested sixteen days later, the level was 24 PPM, a reduction of Ketamine concentration of more than **99.93%**.

### Conclusions

- The proprietary Narc-Gone MX formulation is effective for destruction and removal of both Fentanyl and Ketamine when the drugs are placed in the Narc-Gone MX container.
- Thirty-one days after the drug is placed in the bottle, more than 99.9% of the drugs are no longer detectable. This would be reduced further if the drugs were removed from the outer wrapper and placed in the container per our instructions.
- The level of drug appears to continue to decrease over time, as more of the drug is broken down and the residual breakdown products are adsorbed by the Activated Carbon in the bottle.

A handwritten signature in blue ink, appearing to read 'Eric S. Hoy'.

Eric S. Hoy, Ph.D., SI(ASCP)  
Chief Scientific Officer  
GFMD, Ltd.  
Dallas, Texas 75234

December 7, 2022