January 3, 2022

Science and Technology Directorate
U.S. Department of Homeland Security

Attached are results of testing of the Narc-Gone® MAX drug destruction and disposal system.

For this testing, on November 11, 2021, we placed each of the following drugs in individual 16-ounce Narc-Gone® MAX containers.

- Black Tar Heroin 4.07 gm
- Cocaine 7.13 gm
- 3,4-Methylenedioxymethamphetamine (3,4-MDMA), (Ecstasy) 35.58 gm
- Crystal Methamphetamine 50.35 gm

The containers were transported to Armstrong Forensic Laboratory, Inc., where they were tested by High Resolution Capillary Column Gas Chromatography / Mass Spectrometry (GC/MS) and Attenuated Total Reflectance-Fourier Transform Infrared Spectroscopy (ATR-FTIR) against a target analyte list (TAL) on November 17, 2021.

The results of these analyses are shown in the attached report from Armstrong Forensic Laboratory, Inc. Briefly, we can summarize the findings as follows:

- Black Tar Heroin – No detectable heroin or other controlled substances. The Limit of Detection for the GC/MS system is 9.7 parts per million.

- Cocaine – No detectable cocaine or other controlled substances. The Limit of Detection for the GC/MS system is 9.7 parts per million.

- Ecstasy (3,4-MDMA) – No detectable 3,4-MDMA. The Limit of Detection for the GC/MS system is 9.8 parts per million.

Methamphetamine – Methamphetamine was detected at a level greater than 11 parts per million. Although the level was not quantitated, the Laboratory Director, Kelly L. Wouters, Ph.D., ABC-CC, verbally conveyed that the level was approximately 500 parts per million, which represents more than 99% reduction in the concentration of methamphetamine. A complication with this sample is that the Forensic Laboratory detected a dimethyl sulfone (DMSO2) in addition to the methamphetamine. DMSO2 is frequently used as a cutting agent for crystal methamphetamine [Reference].

Because we do not know how much DMSO2 was used for cutting the crystal methamphetamine, it is not possible to definitely calculate the per cent reduction. The DEA Southwest Laboratory reports that it is not uncommon for the purity of crystal methamphetamine samples to exceed 90 percent [Reference]. Even if the crystal methamphetamine was present as 90% of the original sample, a level of 500 parts per million is still greater than 99% reduction of the crystal methamphetamine.

To check the reproducibility of the crystal methamphetamine results, we asked the Forensic Laboratory to repeat the analysis. The repeat analysis was performed on December 3, 2021. The results of this repeat analysis were essentially the same as the original test for November 17, 2021.

Reference:
https://www.justice.gov/archive/ndic/pubs1/1837/1837t.htm (accessed December 1, 2021)

Respectfully submitted,

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