



COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORENSIC SCIENCE

OFFICE OF THE DIRECTOR
A Nationally Accredited Laboratory

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To: All Law Enforcement Agencies Serviced by DFS
From: Linda C. Jackson, Department Director 
Date: November 8, 2019
RE: **Distribution of 4-AP Field Test Kits to Assist in the Differentiation of Marijuana and Industrial Hemp**

The Department of Forensic Science (DFS) has received grant funding from the Department of Criminal Justice Services to purchase 4-AP (also known as Swiss) field test kits for distribution to law enforcement agencies in Virginia. These Cannabis Typification kits can be used as a tool to assist law enforcement in differentiating between marijuana and industrial hemp, which are both varieties of cannabis. DFS has placed a one-time order for approximately 16,000 of these test kits from Syndicate Chemistry¹.

The kits will be distributed from the Central Laboratory Evidence Receiving Section in a manner similar to the distribution of Duquenois-Levine field test kits. Kits will be mailed to the attention of whomever is assigned to order the marijuana field tests kits from your agency. If your agency has not ordered marijuana field test kits within the past year, please contact Forensic Evidence Manager Ellen Spain to update your agency's point of contact. Ms. Spain can be reached at ellen.spain@dfs.virginia.gov or (804) 588-4027.

Updated instructions for use of the 4-AP test are attached and will also be included with each shipment. To assist with the training of officers in the use of the 4-AP test, DFS has worked with the Virginia State Police to create a training video, which can be found here: https://youtu.be/4PL_6bfaBIQ.

As a reminder, the 4-AP test does not test for the concentration of delta-9-tetrahydrocannabinol (THC) to prove that the plant material has a concentration above 0.3% or any threshold. Instead, it evaluates the ratio of the concentration of THC to cannabidiol (CBD), the predominant cannabinoids found in marijuana and hemp, respectively. If the concentration of THC is more than CBD, the liquid in the kit turns blue, indicating the plant material is potentially marijuana and should be submitted to the laboratory for further testing. If the concentration of CBD is more than THC, the liquid in the kit turns pink, indicating the plant material is potentially hemp and does not need laboratory testing.

The Duquenois-Levine field test is used to determine whether plant material is cannabis, and the 4-AP test assists law enforcement in determining whether to submit the plant material to the laboratory for analysis. As with the Duquenois-Levine field test, the 4-AP test should only be used with plant material. **Use of both kits together is recommended.**

Thank you for your continued patience as we work through the validation and implementation of new methodology to differentiate marijuana and hemp.

¹ Syndicate Chemistry contact information can be found at <https://syndicatechemistry.com/home2>.