

CS 4.1 Controlled Substances Unit: Evidence Matrices – General Testing Guidelines and Suggestions

Substance Form	Extraction solvent (see below)							Photos	Weight	MiScope®	GC/MS	FTIR	Other:
	0	1	2	3	4	5	6						
Plant Material (visually consistent with marijuana)	x	x					x	x	x	x	x		other solvents if suspected laced drugs
Plant Material (not visually consistent with marijuana)	x	x					x	x	x ⁺⁺	x ⁺⁺	x		other solvents if suspected laced drugs
Cigars/Cigarettes		x	x					x		x ⁺	x		
Rock (possibly cocaine)	x							x	x		x	x	
Powder (possibly cocaine)	x							x	x		x	x	
Powder (other than cocaine)	x							x	x		x	x	Borate Buffer extraction if initially negative by GC/MS
Tablets - manufactured (all)	x							x			x		Internet/Computer/Book Searches
CS w/ acetaminophen				x				x	x		x		Borate Buffer extraction is not required if the analyte of interest can be identified without an extraction
CS (low dose)				x				x	x		x	x	
CS (other)	x							x	x		x	x	Borate Buffer extraction if initially negative by GC/MS
Tablets- clandestine (all)	x						x	x			x		Borate Buffer extraction if initially negative by GC/MS
Mushrooms	x		x			x		x			x		
Liquid Pharmaceutical Preparations	x		x		x	x	x	x			x		Extraction will vary depending on matrix
Steroids in Oil					x			x			x		Volume taken but not usually reported
Liquids	x							x			x		Volume taken but not usually reported
Food Stuff (contain oils)					x			x			x		LC/MS may be needed (if validated)
Food Stuff (no oils)	x		x					x			x		
Blotter paper			x					x			x		
Paraphernalia (residues)	x	x	x			x	x	x			x		multiple solvents can be used; at discretion of analyst

= if manufacturer marking indicates a certain analyte is not readily detected using GC/MS, then a Borate Buffer extraction is optional

+= To report marijuana then cystolithic-like hair presence by microscopy (e.g., MiScope®) is required ; To report just Δ⁹-THC then cystolithic-like hair presence by microscopy is not required

++ = If THC is identified then this will be done

Blank Space: Optional / Not routinely performed

0 = Methanol

1 = Petroleum Ether/Methanol (1:1)

2 = Ethyl Acetate

3 = Extraction (e.g., Borate Buffer)

4 = Methanol/Hexane

5 = Ethanol

6 = other appropriate solvent dependent on suspected substance

Note: The above are suggested guidelines and are not required to be performed/used unless specifically stated.