

Interpretation of Urine Drug Testing

Table 3 Known impurities in medication formulations

Formulation	Process Impurities	Allowable Limit (%)	Typically Observed (%)	
Codeine	Morphine	0.15	0.01 –	0.1
Hydrocodone	Codeine	0.15	0 –	0.1
Hydromorphone	Morphine	0.15	0 –	0.025
	Hydrocodone	0.1	0 –	0.025
Morphine	Codeine	0.5	0.01 –	0.05
Oxycodone	Hydrocodone	1.0	0.02 –	0.12
Oxymorphone	Hydromorphone	0.15	0.03 –	0.1
	Oxycodone	0.5	0.05 –	0.4