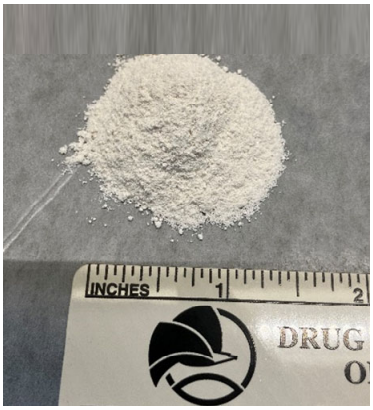
May 2026
DEA-SFL1-DOSE-26-002

New Substance Public Alert
5-Chloro Desmethyl Chlorphine

BACKGROUND



An unknown material was submitted to the DEA Special Testing and Research Laboratory through the DEA Overdose Surveillance Exchange (DOSE) program. The sample was a white powder suspected to contain fentanyl which was seized by the Knoxville (TN) Police Department and transferred to DEA in May 2026. It was found to contain 5-chloro desmethyl chlorphine with an estimated 34% purity.

This is the first time 5-chloro desmethyl chlorphine has been identified by DEA and it has not been previously reported in the National Forensic Laboratory Information System (NFLIS).

CHEMICAL INFORMATION

Chemical Name: 5-chloro-1-(1-(4-chlorobenzyl)piperidin-4-yl)-1,3-dihydro-2*H*-benzo[*d*]imidazol-2-one; 5-chloro-1-[1-[(4-chlorophenyl)methyl]-4-piperidinyl]-1,3-dihydro-2H-benzimidazol-2-one

Molecular Formula: $C_{19}H_{19}Cl_2N_3O$

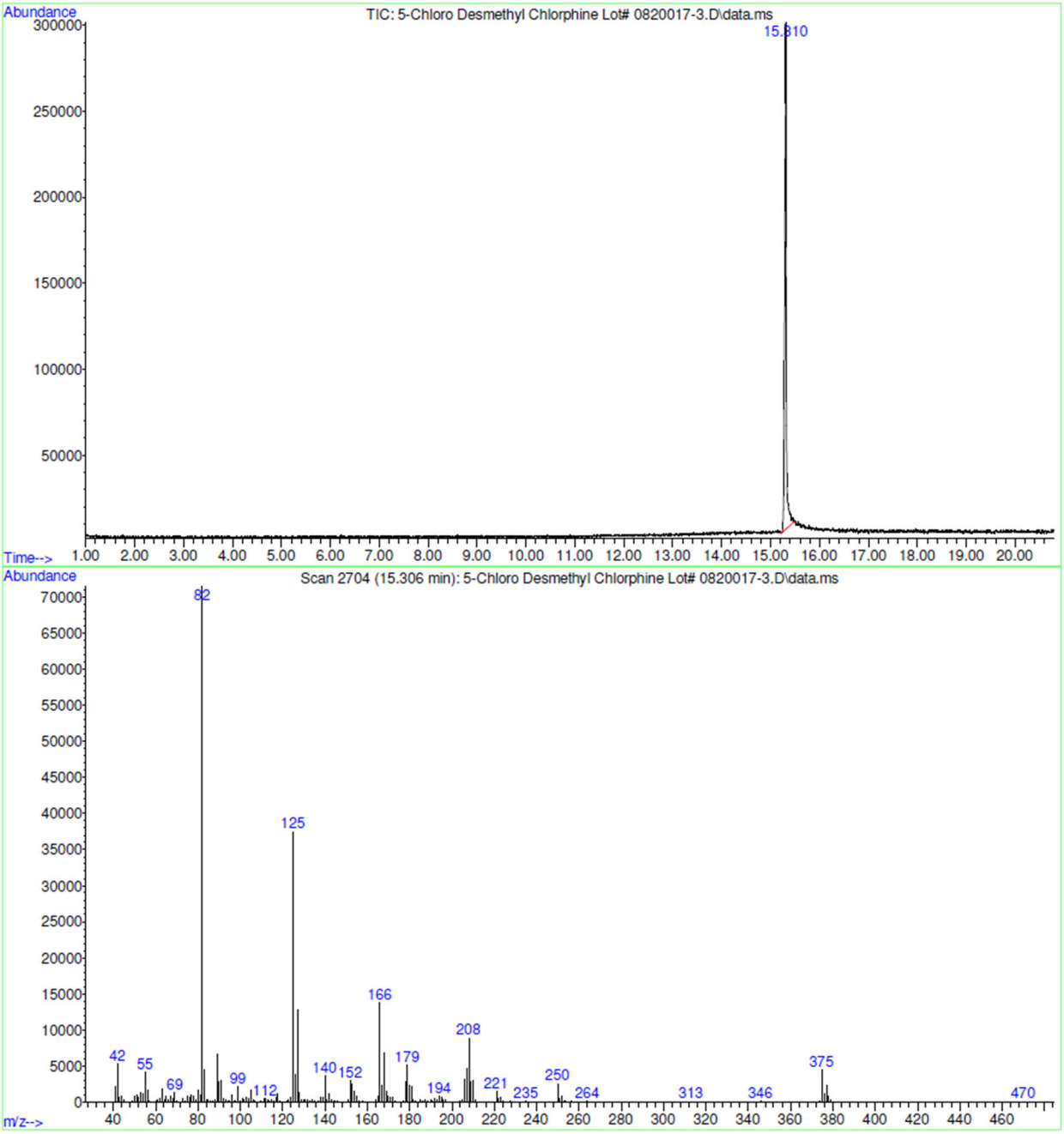
Molecular Weight: 376.3 g/mol

CAS RN: 2575731-77-8

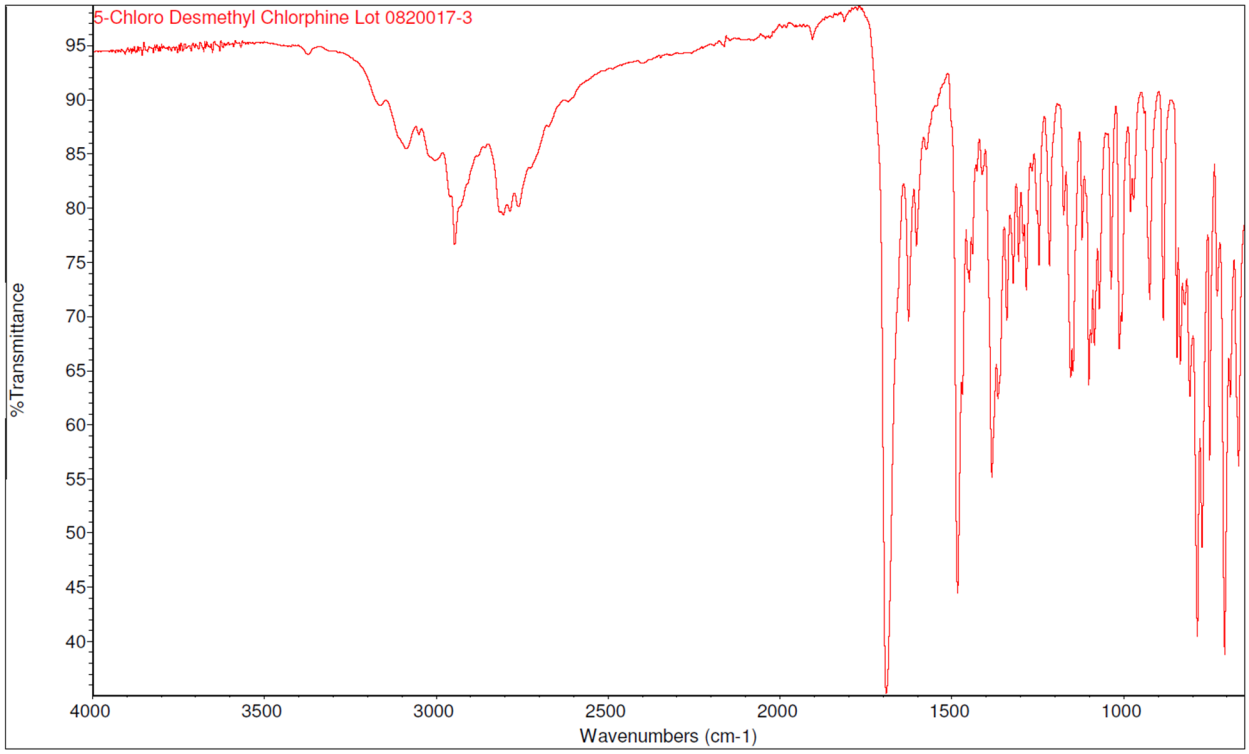
Reference Material: Commercially available

ANALYTICAL DATA

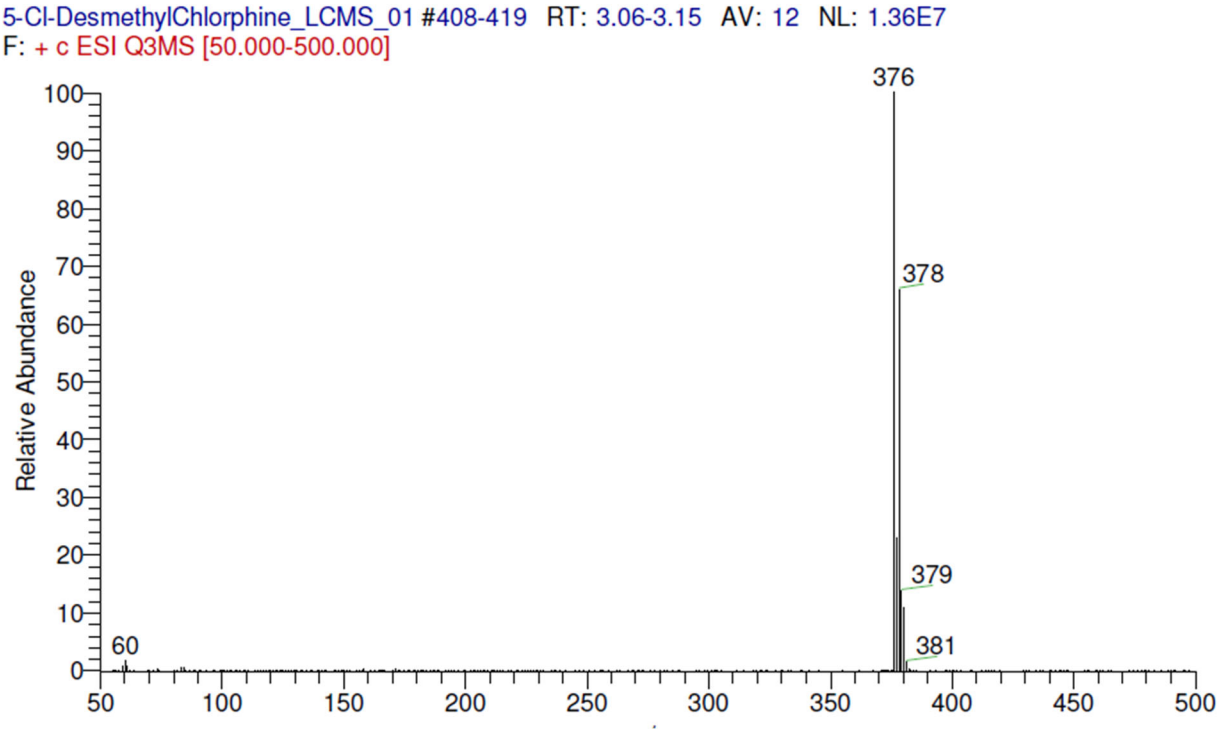
The below analytical data was collected from reference material commercially obtained.



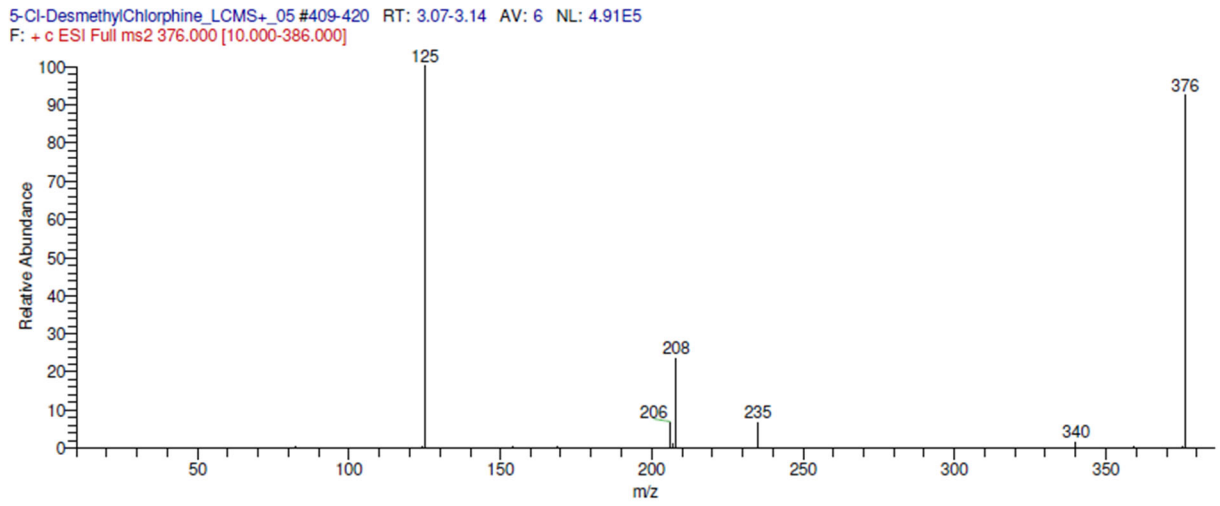
GC-EI-MS data for 5-chloro desmethyl chlorphine



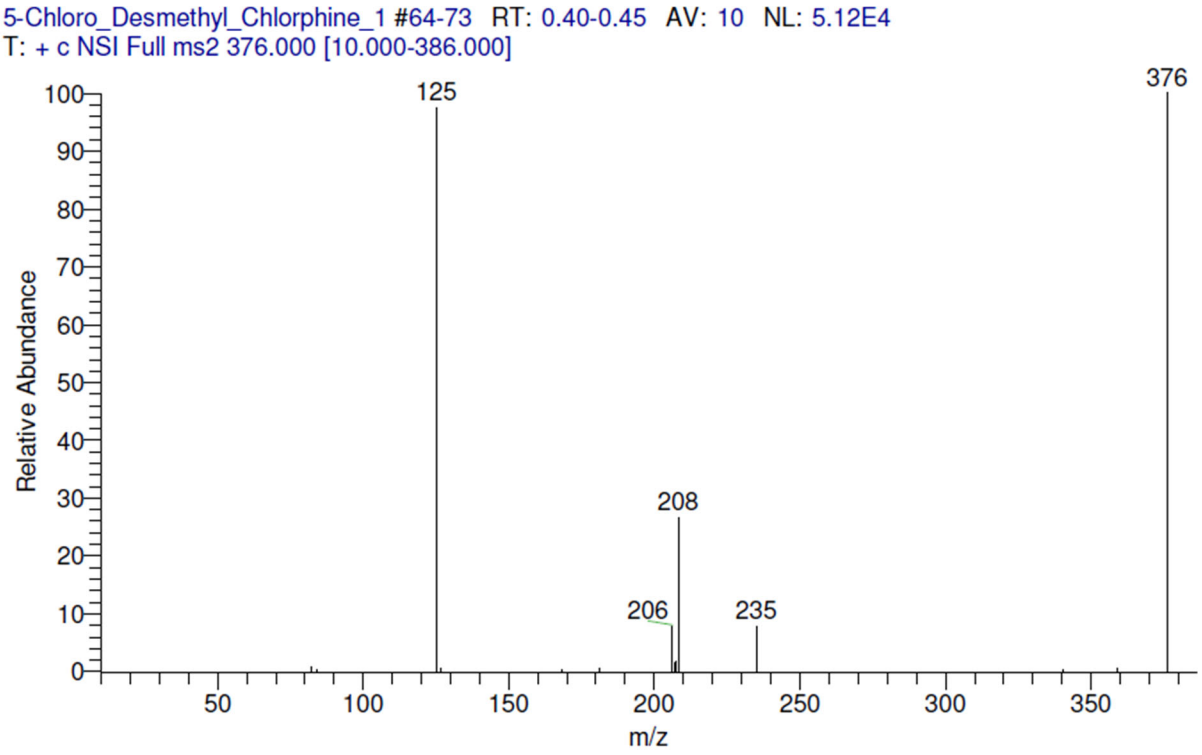
FTIR data for 5-chloro desmethyl chlorphine



ESI-MS data for 5-chloro desmethyl chlorphine



ESI-MS-MS data for 5-chloro desmethyl chlorphine (25V)



DART-MS data for 5-chloro desmethyl chlorphine

RECOMMENDED CITATION

Drug Enforcement Administration. DEA Overdose Surveillance Exchange (DOSE): New Substance Public Alert – 5-Chloro Desmethyl Chlorphine. Dulles, Virginia: US. Special Testing and Research Laboratory, DEA; 2026, May 22.

Click or scan QR code to contact and learn more about DOSE.