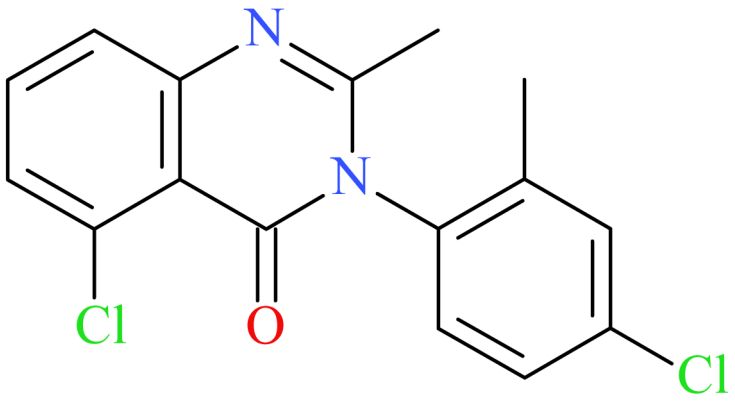
Dicloqualone



NPS SUBCLASS
Miscellaneous
REPORT DATE
June 17, 2025
SAMPLE RECEIVED
November 20, 2024
SAMPLE TYPE
Drug Material

Preferred Name	Dicloqualone
Synonyms	SL-164
Formal Name	5-chloro-3-(4-chloro-2-methyl-phenyl)-2-methyl-quinazolin-4-one
InChI Key	KUIHLOHNUGOCTO-UHFFFAOYSA-N
CAS Number	3476-88-8
Chemical Formula	$C_{16}H_{12}Cl_2N_2O$
Molecular Weight	319.2
Molecular Ion [M⁺]	318
Exact Mass [M+H]⁺	319.0399

Characterization & Intelligence

The following information was compiled in June 2025 and is subject to change as new research is conducted and as new information becomes available:

Description: Dicloqualone is categorized as a quinazolinone and bears structural similarity to other "quaaludes" such as methaqualone. Dicloqualone was first identified in California in early 2022 and has subsequently been identified across the United States.[1,2,3] Dicloqualone was identified by our laboratory in November 2024 and confirmed after acquiring standard reference material.

Sample Source: Chicago Recovery Alliance (Chicago, IL)

Sample Appearance: White powder

Pharmacology: Dicloqualone has sedative properties and increases the activity of GABA receptors similar to that of methaqualone.[4,5]

Toxicology: Dicloqualone has not been detected in toxicology cases to date at the CFSRE.

Drug Materials: Dicloqualone has been detected in one drug material to date at the CFSRE.

Demographics / Geographics: The drug material originated from Chicago, IL, and dicloqualone was found alongside opioids (e.g., fentanyl, heroin) and diphenhydramine.

Legal Status: Dicloqualone is not currently scheduled in the United States.

References:

- Cayman Chemical: SL-164
- [1]Lund et al. Qua-alluding to the past: a case of methaqualone analog ingestion
- [2]Fels et al. Step-by-step procedure to identify previously unknown compounds with LC-QTOF-MS...
- [3]Romanek et al. Return of the quaaludes? Prolonged agitated delirium after intentional ingestion...
- [4]Saito et al. Pharmacological studies on 2-methyl-3(2'-methyl-4'-chlorophenyl)-5-chloro-4[H]-quinazolinone
- [5]Dongwook et al. Facile synthesis of aryl and benzyl substituted 2-methylquinazoline-4(3H)-one...

About: In collaboration with medical examiner and coroner offices, crime laboratories, clinical partners, and other stakeholders, the Center for Forensic Science Research and Education (CFSRE) is documenting first confirmations of NPS through analysis of drug materials and/or toxicology samples. These reports are generated using comprehensive analytical techniques (e.g., GC-MS, LC-QTOF-MS, NMR) and include available information about the new substances identified at the time of reporting, as well as the analytical data generated during testing. Our new drug monographs are intended to assist with the rapid identification of NPS in forensic casework and related disciplines, and should not be used for confirmatory purposes alone.

Analytical Notes: All identifications were made based on evaluation of analytical data (GC-MS and LC-QTOF-MS) in comparison to analysis of acquired reference material.

Acknowledgements: This report was prepared by Sara E. Walton, David Peress, Taylor Wood, Max T. Denn, Alexis D. Quinter, Angel McDowell, Joshua S. DeBord, Barry K. Logan, and Alex J. Krotulski at the Center for Forensic Science Research and Education (CFSRE) at the Fredric Rieders Family Foundation. The authors acknowledge scientists at the CFSRE for their involvements and contributions. For more information, contact npsdiscovery@cfsre.org or visit www.npsdiscovery.org.

Funding: CFSRE's NPS Discovery is supported by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice (Award Number 15PNIJ-24-GK-00981-COAP, "Novel Psychoactive Substance Discovery, Education, and Reporting Institute"). The opinions, findings, conclusions and/or recommendations expressed in this publication are those of the author(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Suggested Citation: Walton, SE; Peress, D; Wood, T; Denn, MT; Quinter, AD; McDowell, A; DeBord, JS; Logan, BK; Krotulski, AJ. (2025) *Dicloqualone— NPS Discovery New Drug Monograph*, Center for Forensic Science Research and Education, United States.

Gas Chromatography Mass Spectrometry (GC-MS)

Laboratory: Center for Forensic Science Research and Education (CFSRE, Horsham PA, USA)

Sample Preparation: Acid-base extraction

Instrument: Agilent 5975 Series GC/MSD

Methods: GC-MS Method Details & Monographs

GC-MS: Mass Spectrum (EI 70 eV)

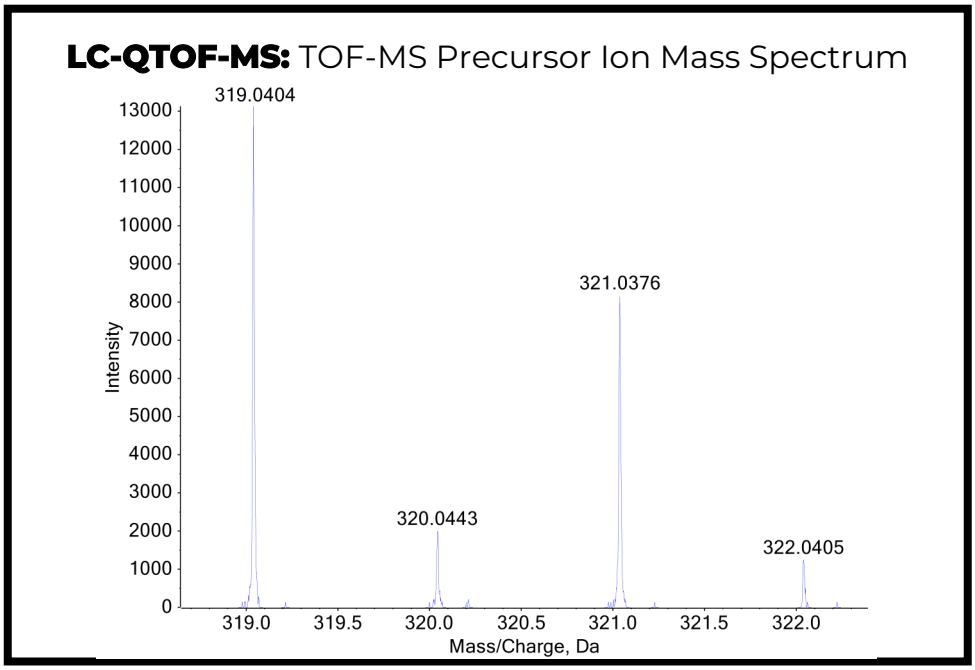
Liquid Chromatography Quadrupole Time-of-Flight Mass Spectrometry (LC-QTOF-MS)

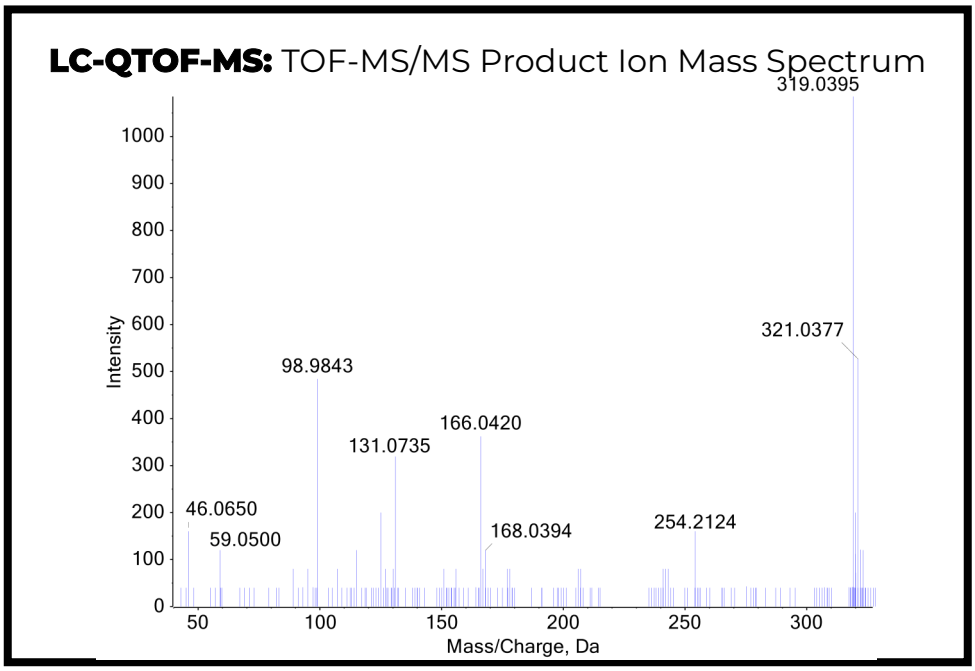
Laboratory: Center for Forensic Science Research and Education (CFSRE, Horsham, PA, USA)

Sample Preparation: Dilution in mobile phase

Instrument: Sciex 5600+ LC-QTOF-MS

Methods: LC-QTOF-MS Method Details & Monographs





Confirmation Using Drug Standard: *Reference material (Batch: 0587630-14) was purchased from Cayman Chemical (Ann Arbor, MI, USA). The analyte was confirmed to be dicloqualone based on retention time (sample: 8.56 min vs. standard: 8.54 min) and mass spectral data comparisons.*