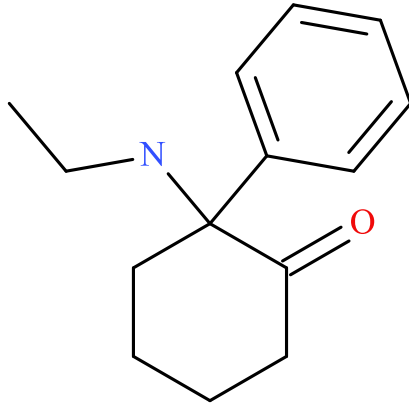


Deschloro-*N*-ethyl Ketamine (O-PCE)

Sample Type: **Biological Sample**



Latest Revision: **June 1st, 2018**

Date of Report: **June 1st, 2018**

1. GENERAL INFORMATION

IUPAC Name:	2-(ethylamino)-2-phenyl-cyclohexanone
InChI String:	InChI=1S/C14H19NO/c1-2-15-14(11-7-6-10-13(14)16)12-8-4-3-5-9-12/h3-5,8-9,15H,2,6-7,10-11H2,1H3
CFR:	Not Scheduled (06/2018)
CAS#	4551-92-2
Synonyms:	O-PCE, 2-Oxo-PCE, 2'-Oxo-PCE, Eticyclidone, 2-DCNEK
Source:	NMS Labs

2. CHEMICAL AND PHYSICAL DATA

2.1 CHEMICAL DATA

Analyte	Chemical Formula	Molecular Weight	Molecular Ion [M ⁺]
Deschloro- <i>N</i> -ethyl Ketamine	C ₁₄ H ₁₉ NO	217.3	217

Important Note: All identifications were made based on evaluation of analytical data (GC-MS) in comparison to analysis of acquired reference material.

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3. SAMPLE HISTORY

Deschloro-*N*-ethyl Ketamine has been identified in one case since March 2018. The geographical and demographical breakdown is below:

Geographical Location: Southern Louisiana (n=1)

Biological Sample: Liver Tissue (n=1)

Date of First Collection: March 5th, 2018

Date of First Receipt: March 10th, 2018

Additional Findings: THC (n=1)

4. BRIEF DESCRIPTION

Deschloro-*N*-ethyl Ketamine is classified as a novel hallucinogen. Novel hallucinogens have been reported to cause effects similar to ketamine and phencyclidine (PCP). Novel hallucinogens have caused adverse events, including deaths, as described in the literature. Structurally similar compounds include ketamine, *N*-ethyl norketamine, and deschloroketamine. Ketamine is a Schedule III substance in the United States.

5. ADDITIONAL RESOURCES

EMCDDA–Europol 2016 Annual Report on the Implementation of Council Decision 2005/387/JHA (http://www.emcdda.europa.eu/publications/implementation-reports/2016_en)

DEA Emerging Threat Report: Annual 2017 (<https://ndews.umd.edu/feature/dea-emerging-threat-report-2017-annual>)

https://www.policija.si/apps/nfl_response_web/0_Analytical_Reports_final/deschloro-N-ethyl-ketamine-ID-1607-16-rpt060816.pdf

<https://www.caymanchem.com/product/14105>

6. QUALITATIVE DATA

6.1 GAS CHROMATOGRAPHY MASS SPECTROMETRY (GC-MS)

Testing Performed At:	NMS Labs (Willow Grove, PA)
Sample Preparation:	Liquid-liquid extraction
Instrument:	Agilent 5975 Series GC/MSD System
Column:	Zebtron™ ZB-35 (15 m x 250 µm x 0.25 µm) - Cut to 13.5 m
Carrier Gas:	Helium (Flow: 0.6 mL/min)
Temperatures:	Injection Port: 220 °C Transfer Line: 280 °C MS Source: 230 °C MS Quad: 150 °C Oven Program: 80 °C initial, 40 °C/min to 340 °C for 1.4 min
Injection Parameters:	Injection Type: Splitless Injection Volume: 2 µL
MS Parameters:	Mass Scan Range: 42-550 m/z Threshold: 50
Retention Time:	3.197 min
Standard Comparison:	Reference material for Deschloro- <i>N</i> -ethyl Ketamine (Batch: 0455833) was purchased from Cayman Chemical Company (Ann Arbor, MI, USA). Analysis of this standard resulted in positive identification of the analyte in the sample as Deschloro- <i>N</i> -ethyl Ketamine, based on retention time (3.197 min) and mass spectral data. (https://www.caymanchem.com/product/14105)

Sample MS (Top and Middle) and Standard MS (Bottom): Deschloro-*N*-ethyl Ketamine

