European Monitoring Centre for Drugs and Drug Addiction

EU EARLY WARNING SYSTEM FORMAL NOTIFICATION

Date issued	26 January 2021	RCS ID	EU-EWS-RCS-FN-2021-0004
Issued by	EMCDDA	Transmitted by	Action on New Drugs Sector, EMCDDA
Subject	Formal notification of 1-[1-(3-chlorophenyl)cyclohexyl]piperidine (3-Cl-PCP) by Slovenia as a new psychoactive substance under the terms of Regulation (EU) 2017/2101		

1. Read me first

This document provides formal notification of the analytical identification of 1-[1-(3-chlorophenyl)cyclohexyl]piperidine (3-Cl-PCP) for the first time in Europe.

Please report any additional data you have on this substance to: ews@emcdda.europa.eu

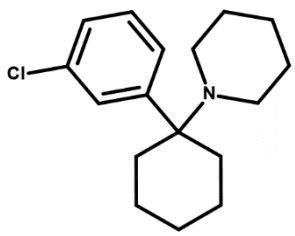
2. Data use restrictions

As with all formal notifications issued by the EU EWS remember that they may contain information that could be regarded as sensitive. Should you provide some of the information in this notification to other groups we would ask that you exercise your best judgment on what information needs to be provided. If you have any questions in this respect, please contact us.

3. Names of substance and other identifiers

- IUPAC name: 1-[1-(3-chlorophenyl)cyclohexyl]piperidine
- Chemical names: 1-(1-(3-chlorophenyl)cyclohexyl)piperidine; 1-[1-(3-chlorophenyl)cyclohexyl]-piperidine
- Common name: 3-Cl-PCP
- Other names: 3Cl-PCP; 3-chloro-PCP; 3-chloro PCP; 3-chloro phencyclidine
- Chemical formula: $C_{17}H_{24}ClN$
- Molecular weight: 277.83
- CAS Registry number: 2201-32-3 (base); 1934-43-6 (hydrochloride salt)
- InChIKey: HUHBTESMMFLCAN-UHFFFAOYSA-N

Molecular structure



4. Substance classification

Arylcyclohexylamine

5. Detection

Type: Collected sample
Case Report identifier: EDND-CR-2021-41

Details: 3-Cl-PCP was identified in 5 grams of white powder test-purchased by the EU-funded project RESPONSE 2 and collected by Slovenian Police on 11 November 2020. The hydrochloride salt form was detected in the sample.

The substance was analytically confirmed using GC-MS, FTIR, GC-MS-IR Condensed Phase, IC, and LC-TOF by the National Forensic Laboratory, and NMR by the Faculty of Chemistry and Chemical Technology. A purity of more than 95% was reported for the sample, based on NMR analysis. The substance was reported to be soluble in water and partially soluble in methanol and dichloromethane.

6. Chemistry and Analysis

Chemical classification: cyclohexylamine; arylcyclohexylamine

3-Cl-PCP is the 3-chloro derivative of PCP, also known as phencyclidine (Schedule II of the 1971 United Nations Single Convention on Psychotropic Substances).

3-Cl-PCP is also structurally related to 3-MeO-PCP, 3-HO-PCP, 3F-PCP and 3-Me-PCP, formally notified in 2012, 2018, 2020 and 2021, respectively. 3-Cl-PCP differs from these four substances by replacement of chlorine with methoxy, hydroxy, fluorine and methyl at the 3-position of the phenyl ring, respectively.

The synthesis of 3-Cl-PCP, as both the base (*compound 5*) and hydrochloride salt (*compound 6*), was described in a 1965 paper ‘The Synthesis of Phencyclidine and Other 1-Arylcyclohexylamines’ [1]. A melting point of 222-224 °C for the hydrochloride salt was reported [1]. The hydrochloride salt of 3-Cl-PCP is available as a reference standard [2].

7. Pharmacology and toxicology

Pharmacological classification: dissociative

There is no information available on the pharmacology and toxicology of 3-Cl-PCP. Based on its structural similarity with other arylcyclohexylamines with known dissociative effects, such as PCP, 3-Cl-PCP is expected to have dissociative effects.

8. Further information

Further information on this substance is available on the EDND profile:
https://ednd2.emcdda.europa.eu/ednd/substanceProfiles/1196

9. Acknowledgements

The Slovenian National Focal Point, Slovenian Police, the Slovenian National Forensic Laboratory and the Faculty of Chemistry and Chemical Technology are kindly acknowledged for the information and analytical data provided.

10. Attachments

None.

11. References

[1] Maddox VH, Godefroi EF, Parcell RF. The synthesis of phencyclidine and other 1-arylcyclohexylamines. Journal of medicinal chemistry. 1965 Mar;8(2):230-5.
[2] https://www.caymanchem.com/product/31475/3-chloro-pcp-(hydrochloride)