



## EU EARLY WARNING SYSTEM FORMAL NOTIFICATION

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Date issued	23 May 2022	RCS ID	EU-EWS-RCS-FN-2022-0014
Issued by	EMCDDA	Transmitted by	Action on New Drugs Sector, EMCDDA
Subject	Formal notification of <i>N</i> -adamantyl-4-(pentyloxy)naphthalene-1-sulphonamide (A-PONASA) by Sweden as a new psychoactive substance under the terms of Regulation (EC) No 1920/2006 and Council Framework Decision 2004/757/JHA		

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### 1. Read me first

This document provides formal notification of the analytical identification of *N*-adamantyl-4-(pentyloxy)naphthalene-1-sulphonamide (A-PONASA) for the first time in Europe.

There is no information available on the pharmacology and toxicology of A-PONASA. However, based on its chemical structure and its similarity to other synthetic cannabinoids, such as CRA-13, it is possible that the substance acts as a cannabinoid receptor agonist and is therefore formally notified based on a precautionary principle.

Please report any additional data you have on this substance to: [ews@emcdda.europa.eu](mailto:ews@emcdda.europa.eu)

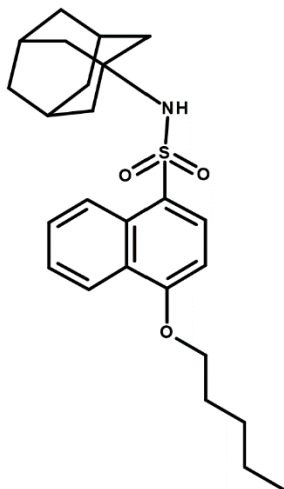
### 2. Data use restrictions

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: *N*-adamantyl-4-(pentyloxy)naphthalene-1-sulphonamide
- Chemical names: *N*-(adamantan-1-yl)-4-(pentyloxy)naphthalene-1-sulfonamide; *N*-(1-adamantyl)-4-pentyloxy-naphthalene-1-sulfonamide
- Common name: A-PONASA
- Chemical formula: C<sub>25</sub>H<sub>33</sub>NO<sub>3</sub>S
- Molecular weight: 427.60
- CAS Registry number: not registered.
- InChIKey: KDLJELWGBJUNBO-UHFFFAOYSA-N

## Molecular structure



## 4. Substance classification

Synthetic cannabinoid

## 5. Detection

Type: Seizure

Case Report identifier: [EDND-CR-2022-153](#)

Details: A-PONASA was identified in 19.6 grams of pale pink powder seized by Swedish Customs on 6 December 2021.

The substance was analytically confirmed using GC-MS, LC-MS and NMR by the Swedish National Forensic Centre (NFC).

### *Other detections*

Type: Seizure

Case Report identifier: [EDND-CR-2021-1114](#)

Details: A-PONASA was identified in 4.2 grams of white powder seized by Bulgarian Customs, at Sofia airport on 28 September 2021. The substance was en-route from China to a private individual in Bulgaria.

The substance was identified using GC-MS by the Bulgarian Customs Laboratory and analytically confirmed by the Joint Research Centre (JRC) in Ispra.

## 6. Chemistry and Analysis

Chemical classification: other; unclassified

A-PONASA is a synthetic cannabinoid, containing an adamantyl linked group (A), a pentoxy tail (PO), naphthyl core (NA) and a sulphonamide linker (SA). This is the first example of a synthetic cannabinoid monitored by the EMCDDA containing a sulphonamide linker.

A-PONASA shares structural similarities with the synthetic cannabinoid CRA-13, formally notified in 2011, both containing a naphthyl core and a pentoxy tail but differing in the linkers and linked groups present. CRA-13 containing a naphthyl linked group (NA), a pentoxy tail (PO), a naphthyl core (NA) and a methanone linked group (MO) could also be known as NA-PONAMO, applying the same naming approach.

## 7. Pharmacology and toxicology

Pharmacological classification: cannabinoid

There is no information available on the pharmacology and toxicology of A-PONASA. However, based on its structural similarity with other synthetic cannabinoids, such as CRA-13, which is reported to be an agonist at CB<sub>1</sub> (k<sub>i</sub>= 6.1 nM) and CB<sub>2</sub> receptors (k<sub>i</sub>= 27.9 nM) [1], A-PONASA could be expected to act as a cannabinoid receptor agonist.

## 8. Further information

Further information on this substance is available on the EDND profile:

<https://ednd2.emcdda.europa.eu/ednd/substanceProfiles/1306>

## 9. Acknowledgements

The Swedish National Focal Point, Swedish Customs, the Swedish National Forensic Centre (NFC), the Bulgarian National Focal Point, the Bulgarian Customs Agency, the Bulgarian Customs Laboratory and the Joint Research Centre (JRC) are kindly acknowledged for the information and analytical data provided.

## 10. Attachments

None.

## 11. References

[1] Dziadulewicz EK, et al. Naphthalen-1-yl-(4-pentyloxynaphthalen-1-yl) methanone: a potent, orally bioavailable human CB<sub>1</sub>/CB<sub>2</sub> dual agonist with antihyperalgesic properties and restricted central nervous system penetration. *Journal of medicinal chemistry*. 2007;50(16):3851-6.