



EU EARLY WARNING SYSTEM FORMAL NOTIFICATION

Date issued	10 February 2021	RCS ID	EU-EWS-RCS-FN-2021-0006
Issued by	EMCDDA	Transmitted by	Action on New Drugs Sector, EMCDDA
Subject	Formal notification of 2,2'-(1 <i>H</i> ,1' <i>H</i> -[2,2'-biindole]-3,3'-diyl) <i>bis</i> (<i>N,N</i> -dimethylethan-1-amine) (BDMT) by Germany 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 2,2'-(1*H*,1'*H*-[2,2'-biindole]-3,3'-diyl)*bis*(*N,N*-dimethylethan-1-amine) (BDMT) for the first time in Europe.

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

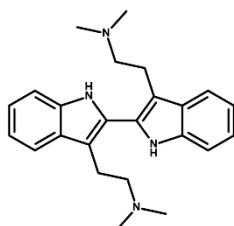
2. Data use restrictions

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: 2,2'-(1*H*,1'*H*-[2,2'-biindole]-3,3'-diyl)*bis*(*N,N*-dimethylethan-1-amine)
- Chemical names: 2-[2-[3-(2-dimethylaminoethyl)-1*H*-indol-2-yl]-1*H*-indol-3-yl]-*N,N*-dimethylethanamine
- Common name: BDMT
- Other names: *bis*-2,2'-(*N,N*-dimethyltryptamine); 2,2'-*bis*-DMT; DMT-2,2'-dimer
- Chemical formula: C₂₄H₃₀N₄
- Molecular weight: 374.52
- CAS Registry number: not registered
- InChIKey: LDSNARXIXVOSTN-UHFFFAOYSA-N

Molecular structure



4. Substance classification

Tryptamine

5. Detection

Type: Seizure

Case Report identifier: EDND-CR-2021-84

Details: BDMT was identified in 4.17 grams of brown granules seized by State Police Mecklenburg-Vorpommern on 30 October 2020. BDMT was identified with DMT in a 'changa' mixture.

The substance was analytically confirmed using GC-MS, (HR)-LC-MS, FTIR and NMR by the EU-funded project ADEBAR plus. The free base form of BDMT was identified.

6. Chemistry and Analysis

Chemical classification: arylalkylamine; indole alkylamine; tryptamine

BDMT, also known as *bis-2,2'-(N,N-dimethyltryptamine)*, is structurally related to the internationally controlled tryptamine DMT (*N,N-dimethyltryptamine*) (Schedule I of the 1971 United Nations Single Convention on Psychotropic Substances). BDMT is the 2,2'-dimer of DMT.

BDMT was identified in a 'changa' mixture with DMT. Changa is a smoking mixture that is reported to contain freebase DMT 'and β -carbolines (extracted from *Banisteriopsis caapi* or *Peganum harmala*)' [1].

7. Pharmacology and toxicology

Pharmacological classification: hallucinogen

There is no information available on the pharmacology and toxicology of BDMT. Based on its chemical structure and on its chemical similarity to DMT, BDMT is expected to act on the serotonin receptors and to produce hallucinogenic and psychedelic effects.

The mechanisms of action for compounds found in changa are reportedly 'quite similar to those found in the ayahuasca beverage' and 'the effects of smoked changa last about 15–30 min' [1]. A case report identified in the literature indicates that the smoking of changa 'may exert an analgesic effect'; the authors noted however that further research is needed on the specific mechanisms through which long-lasting analgesic effects can be produced [1].

8. Further information

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

<https://ednd2.emcdda.europa.eu/ednd/substanceProfiles/1200>

9. Acknowledgements

The German National Focal Point, State Police Mecklenburg-Vorpommern and the EU-funded project ADEBAR plus are kindly acknowledged for the information and analytical data provided.

10. Attachments

None.

11. References

[1] Ona G, *et al.* Long-lasting analgesic effect of the psychedelic drug changa: A case report. *Journal of Psychedelic Studies*. 2019;3(1):7-13.