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I-TREND Substance briefing Brepheдрone

This technical folder provides information on Brepheдрone. The information provided is based on a number of existing data sources and work undertaken as part of the I-TREND project. Research informing the folder includes an analysis of user discussions on popular Polish drug forums, an analysis of marketing on popular Polish web shops selling the substance, and scientific laboratory analysis of the compound through test purchasing of the substance from Polish web shops.

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1. Substance name(s)

1.1.Chemical name:

Brephedrone

1.2.Other names (e.g. popular/street/slangname(s))

4-BMC, 4-Bromomethcathinone, 4-BMC, 4-BMAP

1.3. Branded products containing the compound

Lack of information

2. Classification and effect

2.1. EMCDDA substance group classification

Cathinones

2.2. Substance analysis results

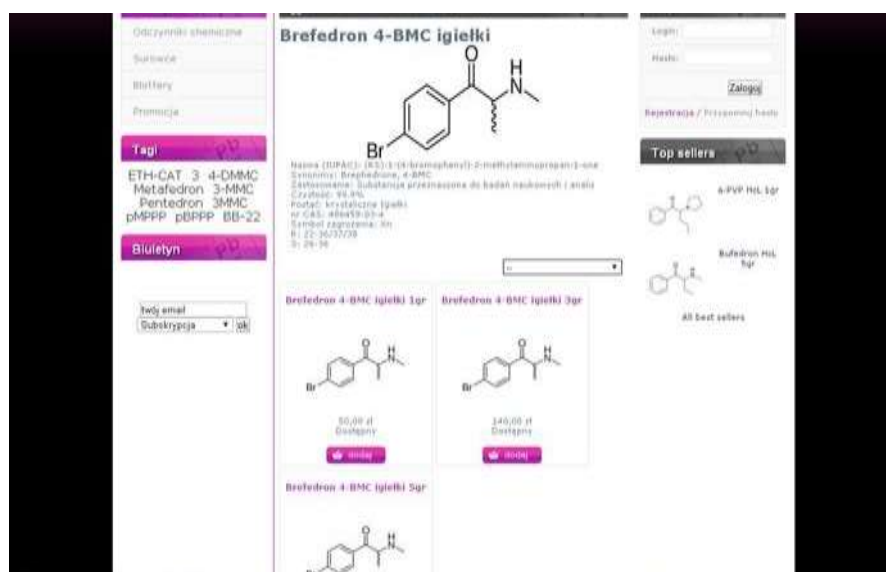
Pentedrone 38%

2.3. Polish drug forum monitoring

alpha-aminocethons

2.4. Polish web shops marketing

The *Brephedrone* substance was found only on one shop selected for web shops marketing analysis. It has not any special marketing strategy nor exposition (see picture below).



3. Legal status and identification of the substance

3.1. Legal status/acts/laws in Poland

Not controlled as a narcotic drugs or psychotropic substances by Polish law. As such, it is not listed in the schedules of drugs of act of counteracting drug addiction (the main drug law). The possession and trafficking is not punishable by criminal sanctions.

But the substance, as all NPS is controlled as substitute drug (*środek zastępczy*). Its manufacturing

and introducing to trade is forbidden in territory of Poland under punishment of fine ranging from 20000PLN (~4600 euro) to 1000000 PLN (~230.000 euro).

3.2.EMCDDA Notifications of brephedrone

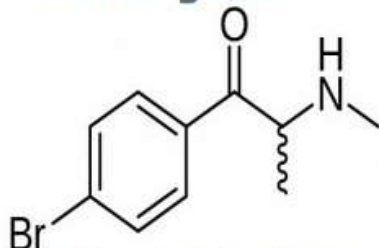
Brephedrone was first reported at the European level by Finnish authorities in 2011. In June 2012 the substance was identified for the first time in Poland. The substance has been reported to the EMCDDA by the following EU countries:

Country	Date
Finland	September 2011
Norway	March 2012
Poland	June 2012
Sweden	August 2012
Germany	December 2012
Hungary	September 2013
Ireland	April 2013
Latvia	August 2014

4. Photographs of the substance

4.1.Images used in the marketing of the product on the web shops the compound was purchased

Brefedron 4-BMC igielki



Nazwa (IUPAC): (RS)-1-(4-bromophenyl)-2-methylaminopropan-1-one
Synonimy: Brephedrone, 4-BMC
Zastosowanie: Substancja przeznaczona do badań naukowych i analiz
Czystość: 99.9%
Postać: krystaliczne Igielki
nr CAS: 486459-03-4
Symbol zagrożenia: Xn
R: 22-36/37/38
S: 26-36

4.2. Photograph of the substance purchased for laboratory analysis



5. Analytical composition: results of substance analysis carried out on samples purchased online

(PL IPIP address web shops)

Web shop	Date of purchase	Form	Substance named on package/web shop	Confirmed substances
Research chemical shop 1	24.07.14	cristal	4-Bromomethcathinone (4-BMC HCL)	Pentedrone 38%

6. Price and marketing strategies on Polish web shops selling Brepheдрone

6.1. Compound Prices: Powder

	Polish zloty	Quantity
Minimum price	ZL 200	5 gram
Maximum price	ZL 50	1 gram

6.2. Description of availability and marketing strategies on Polish web shops selling the Brepheдрone

The *Brepheдрone* substance was found only on one shop selected for web shops marketing analysis¹.

¹ The total number of web shops selling new synthetic drugs for Poland (16.3.2015) was 74. (For detail

6.3. Number of Polish based web shops selling

1 out of 5 top Polish on-line shops

6.4. Type of Polish websites selling the product

Only one webshop, assimilated to a Research chemical shop has been found.

7. Law enforcement and health data

7.1. Number of law enforcement seizures in Poland in 2013/2014

45 in 2013 and 31 in 2014.

7.2. EMCDDA health alerts in Poland

0

7.3. Confirmed deaths and acute cases reported in Poland

0

8. User experiences of the substance: results from an analysis of discussions in two Polish Drug

Forums

There was one topic devoted exclusively to Brepheдрone. It came from <http://hyperreal.info/talk/> forum. It has started on May 2010. It contained 1015 posts when downloaded. In the monitoring period the number of posts increased from 1016 in September 2013 to 1022 in the December 2014. The number of views increased from 92071 in September 2013 to 116666 in the December 2014.

8.1. Dosage specified by drug forum users (n =15 posts by 11 users)

There is quite little information on the forum with regards to the dosage of Brepheдрone. There is no recommendation of the dosage, but several users reported how much they consumed of this compound on just one occasion of consumption. Dosing seems to be related to Route of administration.

The doses described by users ranged from 50 to 350 mg.

The below list reports provides examples of dosage by ROA:

- 85 mg sniff + 50 mg oral then after one hour 120 mg oral
- 180 mg sniff + 250 mg oral

information about methodology of monitoring and selecting the web shops see methodology on <http://www.i-trend.eu/>). For the marketing analysis we chose 15% of the most popular web shops from Poland list of shops. The shops operating on platform otwarte24.pl and shops which provide just bulk/wholesale order were removed from our selection. In addition another 6 web shops, previously chosen for the purchase of substances, were added to the marketing analysis. The final number of web shops used for analysis was 15. For latter analysis, we use only shops where product was available.

- 80mg oral
- 100mg (no RoA mentioned)
- 50—150mg (no RoA mentioned)
- 100-200 mg sniff, rated better than oral (which gave the user side effects)
- 100 mg sniff for the first time
- more than 200mg to get any effects
- 350 mg after alcohol, difficult to overdose
- 50mg oral (no effects) and after 2 hours boosting of 50 mg (no effects)
- oral intake –light 50mg, common 80mg, strong +100mg
- 220mg oral – (euphoria similar to Mephedrone)

8.1.1.Threshold

Discussed as -200mg by one user.

Users mentioned several times that this is a user friendly substance and that it cannot be easily overdosed. Quite contrary, a high dosage is reported to achieve effects.

8.2.Duration (n =4 posts by 4 users)

8.2.1.Onset

5 min and 15 min.

8.2.2.Coming up: 40 min.

8.2.3.Plateau

1 -3,5 hours).

8.2.4.Coming down

6-7 hours.

Some users reported that it is easy to fall asleep after 6-7 hours of consumption. Day after is reported as normal, without after-effects.

8.3.Effects of brephedrone reported by forum users (n = 16 posts by 13 users)

Brephedrone is reported to give effects more like antidepressants than stimulants. Accounts suggest that effects vary significantly from user to user and effects were described as very individualistic. Both physical and psychological negative side effects were rarely reported. Quite contrary Brephedrone is claimed to have no undesired side effects.

8.3.1.Physical

- *Desired:*

No desired physical effects were reported.

- *Undesired*

sweating, elevated heart rate, mydriasis, tense jaw, light numbness and two reported lightly elevated heart rate

8.3.2. Psychological

- *Desired*

relaxation, light mood enhancement, (light) euphoria, empathy, stimulation of sensory experiences (music appreciation is mentioned once); light coming down and no day after effects, euphoria goes hand in hand with total relaxation and peacefulness.

- *Undesired*

light psychosis

8.3.3. Tolerance: (0 posts)

There was no discussion related to tolerance.

8.4. Route of administration (n = 13 posts by 10 users)

Snorting and oral intake were reported. Oral was reported as being more effective. Quite often both routes of administration were mentioned as taking place during one occasion of consumption: snorting first followed by oral intake. The dosage in such cases varied; sometimes snorting dosage was larger than oral once, other times oral use was larger than snorting dosage.

8.5. Other substances referred to when discussing brephedrone (n = 8 posts by 5 users)

8.5.1. Comparable effects

- **Mephedrone** (different than **Mephedrone** and cannot be treated as such; on the other hand was recommended just because is like Mephedrone)
- **Buphedrone** (rated worse)
- Ecstasy, **MDMA** (Similar)
- **Methylone** (Better)

8.5.2. Other substances used in the same session

Brephedrone was recommended by forum users as 'the best' when taken without other drugs, medicines or NPS. However some users reported mixing the substance with:

- **4-EMC** (to get effects similar to daydreaming)
- **MDPV** (to increase stimulation)
- **Buphedrone** (to increase euphoria)
- **pFPP** (to increase hallucination and euphoria)
- MDPV, Naphyron, 2-DPMP (no effects reported).
- MDPV and Buphedrone (no effects reported);
- Alcohol

8.5.3. Substances to enhance effects

There was no discussion around substances used to enhance effects.

8.5.4. Substances used to manage negative effects

There was no discussion around substances used to manage negative effects.

8.6. Appearance and preparation

8.6.1. Appearance (1 post by 1 user)

There was no description of an appearance of Brepheдрone on the forum, but there was one description of its taste as awful and similar to *koko mint*(?)

8.6.2. Cook/preparation (0 posts)

There was no discussions around preparation.

8.7. Patterns/Frequency of use (n= 0 posts)

There was no discussion around patterns and frequency of use.

8.8. User's views and experiences on the online market use – online survey result (n= 58 discussions)

8.8.1. Survey findings

The below provides main findings from a survey of NPS users

Did you use any of the following new psychoactive substances?

Brefedron	58	4,2%
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What was the new psychoactive substance you used last time?

Brefedron	4	0,4%
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The population is too small to conduct further analysis.

9. Harm reduction, warnings and advice provided by online peers (n=0 discussions)

There was no discussions on harm reduction, warnings and advice

10. References:

Foley, K. F.; Cozzi, N. V. (1999). "Bromine substitution at the ring 3- or 4-position of methcathinone enhances potency at serotonin uptake transporters". *Society for Neuroscience Abstracts* 25 (1–2): 1701. 678.17.

Foley, K. F.; Cozzi, N. V. (2002). "Inhibition of transport function and desipramine binding at the human noradrenaline transporter by N-ethylmaleimide and protection by substrate analogs". *Naunyn-Schmiedeberg's Archives of Pharmacology* 365 (6): 457–461. doi:10.1007/s00210-002-0532-3. PMID 12070759.

Foley, K. F.; Cozzi, N. V. (2003). "Novel aminopropiophenones as potential antidepressants" ,*Drug Development Research* 60 (4): 252–260. doi:10.1002/ddr.10297.

