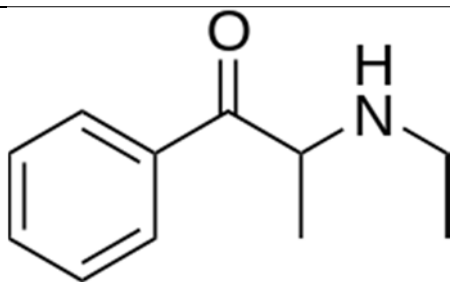


	Substance briefing: Ethcathinone
	<p>This technical folder provides information on Ethcathinone. The information provided is based on a number of existing data sources and work undertaken as part of the I-TREND project. Research informing the folder includes an analysis of user discussions on popular (insert country name) drug forums, an analysis of marketing on popular (insert country name: e.g. English speaking) web shops selling the substance, and scientific laboratory analysis of the compound through test purchasing of the substance from (insert country name) web shops.</p>
1	Substance name(s)
1.1	<p>Chemical name: (RS)-2-ethylamino-1-phenyl-propan-1-one</p>
1.2	<p>Popular/street/slangname(s): Users on Czech forums do not have a slang/street/ popular name for this substance, commonly called ETH-CAT, E-cat, Radon – Bongbastic (“bong cleaner”)</p>
1.3	<p>Other name(s): N-ethylcathinone, Ethylcathinone, Ethylpropion, 2-Ethylaminopropiophenone</p>
1.4	<p>Branded products in which the substance was found following analysis:</p>
1.5	<p>Branded products advertised as containing the substance on web shops: Fiesta Ekogroszek Ibiza Czech web shop analysis found no web shop advertised branded products as containing <i>Ethcathinone</i> substance.</p>
1.6	<p>Branded products discussed as containing the substance on drug forums: No branded products were discussed as containing Ethcathinone</p>
2.	Classification and effect

2.1	<p>Classification and effect confirmed through substance analysis</p> <ul style="list-style-type: none"> • Cathinones
2.2	<p>Classification and effect referred to by users of drug forums</p> <ul style="list-style-type: none"> • Cathinones
2.3	<p>Classification and effect used in the marketing of the product on web shops</p> <p>The <i>Ethcathinone</i> was classified as a research chemical according to an analysis of Czech web shops. The web shops' analysis found two web shops selling <i>Ethcathinone</i> under a 'stimulant' category. In addition these web shops classified <i>Ethcathinone</i> more specifically as a substance of cathinone class.</p> <p>Information about effects was provided by two shops. The web shops described <i>Ethcathinone</i> as a substance with 'stimulus' effects.</p> <p>NB: See reference list for sources related to classification (e.g. pharmacological studies, case studies, etc...)</p>
3	<p>Potential risks associated with use of the substance</p>
3.1	<p><i>General risks associated with the substance:</i></p> <p><i>generally minimum of information; in high doses (over 200mg) increased risk of peripheral stimulation, cramps, convulsions, dehydration etc.; possible risk of addiction; risky combination with IMAO; increased risk in people with cardiovascular diseases</i></p> <p><i>Used for stimulation effects, slight euphoria, short-term effects weaker than effects of mephedrone.</i></p> <p><i>Unpleasant psychological effects:</i></p> <ul style="list-style-type: none"> • <i>Anxiety, nervousness, fear, insomnia</i> • <i>Paranoia and hallucinations at higher doses</i> • <i>Boosting and repetitive use – high potency for dependence</i> <p><i>Unpleasant physical effects:</i></p> <ul style="list-style-type: none"> • <i>Slight decrease of appetite, mydriasis</i> • <i>Unpleasant physical effects like chills, goose-bumps, tremors, redness in the face</i> • <i>Tachycardia, blood pressure elevation, palpitations</i> • <i>Insensitive fingertips</i> • <i>Jaw clenching, bruxism, muscle convulsions, nausea, sweating</i> • <i>Pain after snorting of the substance</i> • <i>With higher doses cramps and dehydration</i>

	<p>Assumed risks due to similarity to other substances:</p> <ul style="list-style-type: none"> • Similarity to MDPV, cathinone and cocaine is assumed, therefore effects can involve: stimulation, faster breathing, tachycardia, suppression of appetite, dehydration, after effect (fatigue), paranoia. At higher doses (more than 200mg) fear, paranoia and hallucinations • Toxicity and pharmacology data are not available, most of available information is assumed from cathinone structure • Combination with monoaminooxidase inhibitors could be risky/dangerous (IMAO) 								
3.2	<p>Users point of view on the substance and risk perception: <i>Ethcathinone was rarely discussed on Czech forums, therefore risk perception of users could not be assumed from this source.</i></p>								
4	Legal status and identification of the substance								
4.1	<p>Legal status/acts/laws in Czech republic. Ethcathinone is not controlled substance in Czech Republic..</p>								
4.2	<p>List of first identification and reporting to the EMCDDA by a national Reitox Focal Points</p> <table border="1"> <thead> <tr> <th>Country</th> <th>Dates</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td>Not reported</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Country	Dates			Not reported			
Country	Dates								
Not reported									
5	Photographs of the substance								
5.1	Photograph of the substance purchased for laboratory analysis:								
5.2	Photo/Printscreen of the product from the webshop:								
6	Chemistry								
6.1	<p>Chemical Abstracts Service (CAS) registry number: 51553-17-4</p>								
6.2	<p>Chemical information: <i>Ethcathinone is a methylphenidate-like DA/NE reuptake inhibitor (Rothman 2005). Its mechanism of action is similar to other appetite suppressants such as sibutramine, phentermine and dextroamphetamine. Chemically, it is the N-ethyl homologue of cathinone and dimethylcathinone.</i></p>								
6.2	Structure (picture of structural formula)								



6.3	Molecular mass 177.3 g/mol																														
6.4	Structural comparison with a related substance synthetic cathinon																														
6.5	(Insert pictures of developed formula of this original substance)																														
7	Analytical composition: results of substance analysis carried out from the sample purchased online.																														
7.1	<p>Details of laboratory analysis technique used:</p> <p>Mean (%) = (sd.= .) (N sample analysed)</p> <table border="1"> <thead> <tr> <th>Webshop</th> <th>Country (IP address)</th> <th>Country (package origin)</th> <th>Form</th> <th>Substance named on package/web shop</th> <th>Confirmed substances</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> <td>benzofury</td> <td>6 APB</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td>Mephedrone</td> <td>Mephedrone</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Webshop	Country (IP address)	Country (package origin)	Form	Substance named on package/web shop	Confirmed substances	1				benzofury	6 APB	1				Mephedrone	Mephedrone	2						2					
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8	Price and marketing strategies on (insert country name) web shops																														

selling the substance									
8.1									
8.2	<p>Description of availability and marketing strategies on Czech web shops selling the substance: The <i>Ethcathinone</i> was available to purchase (28.5.2015) in 2 web shops where the substance was found¹.</p> <p>Czech web shop marketing analysis indicated no shop which offered discount for orders.</p> <p>Free gift was not promoted by any web shop.</p> <p>Free shipping was offering on no web. The guarantee of “free reship” for orders was provided by two web shops. The same day dispatch was supported by no web shop.</p> <p>Information about ‘new’ products was mentioned on two web shops.</p> <p>Loyalty program or Reward Point program for customers was available on one web shop.</p> <p>Customer reviews was supported on two web shops.</p>								
8.3	<p>Type of (insert country name) websites selling the product</p> <table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th>No of shops (28.5.2015)</th> </tr> </thead> <tbody> <tr> <td>RC shops</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Commercial shops</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Other</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>		No of shops (28.5.2015)	RC shops	2	Commercial shops	0	Other	0
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8.4	<p>Number of webshops available for Czech republic with supposed country of origin in the EU selling the products – is not available.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th>No of web shops</th> </tr> </thead> <tbody> <tr> <td>CZ address or phone</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>		No of web shops	CZ address or phone	0				
	No of web shops								
CZ address or phone	0								

¹ The total number of web shops selling new synthetic drugs for CZ (16.3.2015) was 33. (For detail 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 CZ list of shops. The shops without prices for products 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 11. For latter analysis, we use only shops where product was available.

	number on web sites		
	Web shops with CZ IP code	0	
	Web shops <i>with supposed country of origin in the EU²</i>	2	
9	Law enforcement and health data		
9.1	Number of law enforcement seizures in Czech republic in 2013/2014 Seizure made by law enforcement were in 2013 1/10 g and none in 2014.		
9.2	EMCDDA health alerts in Czech republic. EMCDDA health alerts in Czech republic were none.		
9.2	Confirmed deaths and acute cases reported in Czech Republic were in no cases, the same for confirmed death - no known case.		
10	<u>User experiences of the substance: results from an analysis of discussions Czech Drug Forums</u> Methodological comment: The information below is based on an analysis of 1 drug forums, 2 forum posts and 2 forum users.		
10.1	Dosage specified by drug forum users (n = number of quotations) <ul style="list-style-type: none"> • <i>Initial Dosing: There was no discussion on initial dose (n= 0)</i> • <i>Boosting: There was no discussion on boosting dose (n= 0)</i> • <i>Threshold: There was no discussion on threshold dose (n= 0)</i> • <i>Light: There was no discussion on light dose (n= 0)</i> • <i>Common: There was no discussion on common dose (n= 0)</i> • <i>Strong: There was no discussion on strong dose (n= 0)</i> 		
10.2	Duration <ul style="list-style-type: none"> • <i>Onset: There was no discussion on onset time (n =0)</i> • <i>Coming up: There was no discussion on coming up(n =0)</i> • <i>Plateau: There was no discussion on plateau (n =0)</i> • <i>Coming down: There was no discussion on coming down (n =0)</i> 		

² Including web shops with CZ address or phone number on web sites

	<ul style="list-style-type: none"> • <i>After effects: There was no discussion on plateau (n =0)</i> • <i>Hangover/Day after : There was no discussion on hangover (n =0)</i>
10.3	<p>Effects reported by forum users (n = 1)</p> <p><i>Physical effects</i></p> <ul style="list-style-type: none"> ○ <i>Pain of genitalia (n=1)</i> <p><i>Psychological effects</i></p> <ul style="list-style-type: none"> ○ <i>Not discussed in Czech forums</i> <p><i>Sought/expected</i></p> <ul style="list-style-type: none"> ○ <i>Not discussed in Czech forums</i> <p><i>Desired</i></p> <ul style="list-style-type: none"> ○ <i>Not discussed in Czech forums</i> <p><i>Undesired</i></p> <ul style="list-style-type: none"> ○ <i>Not discussed in Czech forums</i>
10.4	<p>Tolerance</p> <p><i>Tolerance was not discussed in Czech drug forums.</i></p>
10.5	<p>Route of administration (n =0)</p> <ul style="list-style-type: none"> • <i>Ingestion: This ROA was not mentioned in Czech drug forums (n =0)</i> • <i>Snorting: This ROA was not mentioned in Czech drug forums (n =0)</i> • <i>Rectal: This ROA was not mentioned in Czech drug forums (n =0)</i> • <i>Inhalation or insufflation: This ROA was not mentioned in Czech drug forums (n =0)</i>
10.6	<p>Others substances referred to in discussion about (insert drug name)</p> <ul style="list-style-type: none"> ○ <i>Referred to in comparing the effects : Not mentioned on Czech drug forums (n =0)</i> ○ <i>Referred to as increasing the effects: Not mentioned on Czech drug forums (n =0)</i> ○ <i>Referred to in managing come down: Not mentioned on Czech drug forums (n =0)</i> ○ <i>Other substance discussed in the same episode/combo: Not mentioned on Czech drug forums (n =0)</i> ○ <i>Referred to as an agonist/ antagonist : Not mentioned on Czech drug forums (n =0)</i>
10.7	<p>Appearance and preparation (n =0)</p> <ul style="list-style-type: none"> ○ <i>Not mentioned on Czech drug forums (n =0)</i>
10.8	<p>Patterns of use/Frequency of use</p> <ul style="list-style-type: none"> ○ <i>Not mentioned on Czech drug forums (n =0)</i>

10.9	Context of consumption ○ <i>Not mentioned on Czech drug forums (n =0)</i>
10.10	User's views and experiences on the online market ○ <i>Not mentioned on Czech drug forums (n =0)</i>
10.11	Harm reduction Message ○ <i>Not mentioned on Czech drug forums (n =0)</i>
10.12	User profile <i>Effects, experiences and dosages of Ethcathinone were not discussed.</i>
11	Useful resources and literature <ul style="list-style-type: none"> ▪ http://cs.wikipedia.org/ ▪ http://en.wikipedia.org/ ▪ http://www.emcdda.europa.eu/ ▪ NSD zaostreno200404_syndrogy_web.pdf ▪ http://www.drogy-info.cz/ ▪ Rothman a Baumann (2006) – Current topics in medicinal chemistry 6(17):1845-1859