	Substance briefing: 3-MMC
	This technical folder provides information on <b>3-MMC</b> . 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 Czech drug forums, an analysis of marketing on popular (Czech, e.g. English speaking) web shops selling the substance, and scientific laboratory analysis of the compound through test purchasing of the substance from Czech web shops.
1	Substance name(s)
1.1	Chemical name: 3-Methylmethcathinone
1.2	Popular/street/slangname(s): 3-MMC
1.3	Other name(s): 2-(Methylamino)-1-(3-methylphenyl)-1-propanone
1.4	Branded products in which the substance was found following analysis:
1.5	Branded products advertised as containing the substance on web shops: Czech web shop analysis found no web shop advertised branded products as containing <i>3-mmc</i> substance
1.6	Branded products discussed as containing the substance on drug forums:  "Cherry cocolino" branded product was discussed as possibly containing 3-MMC (n=1).
2.	Classification and effect

2.1	Classification and effect confirmed through substance analysis  Cathinones
2.2	Classification and effect referred to by users of drug forums  • Cathinones
2.3	Classification and effect used in the marketing of the product on web shops  The 3-mmc was classified as a research chemical according to an analysis of Czech web shops in two web sho. The web shops' analysis found two web shops selling 3-mmc under a 'stimulant' category. In addition three web shops classified 3-mmc more specifically as a substance of cathinone class.  Information about effects was provided by one shop. The shop described 3-mmc as a substance with stimulant effect.  NB: See reference list for sources related to classification (e.g. pharmacological studies, case studies, etc)
3	Potential risks associated with use of the substance
3.1	General risks associated with the substance: lack of informations - cathinones - average supposed risks
3.2	Users point of view on the substance and risk perception  3-MMC was discussed by forum users whether it is cardiotoxic. Periods of no use after heavy use are recommended to prevent
	possible cardiologic problems. 2 weeks were recommended by some users. Intranasal use is also arising concerns with some users that use 3-MMC frequently, the burning in the nose escalated with further use of 3-MMC and nosebleed occurred as well. The users are afraid that it might cause irreparable damage to the nasal cavity.
4	some users. Intranasal use is also arising concerns with some users that use 3-MMC frequently, the burning in the nose escalated with further use of 3-MMC and nosebleed occurred as well. The users are afraid that it might cause irreparable damage
<b>4</b> 4.1	some users. Intranasal use is also arising concerns with some users that use 3-MMC frequently, the burning in the nose escalated with further use of 3-MMC and nosebleed occurred as well. The users are afraid that it might cause irreparable damage to the nasal cavity.

	Country	Dates
	Czech republic	26 kg seizure reported
5	Photographs of the substance	
5.1	Photograph of the substance p	ourchased for laboratory analysis:
5.2	Photo/Printscreen of the produ	ict from the webshop:
6	Chemistry	
6.1	Chemical Abstracts Service (C 1246911-86-3	CAS) registry number:
6.2	_	thinone. It is a positional isomer of the position of the methyl group on
6.2	Structure (picture of structural	formula)

			H N			
6.3	Molecular mass 177,24 g/mol					
6.4	Structural comparison with a related substance:  3-MMC is a synthetic ring-substituted cathinone; a positional isomer of mephedrone, differing only in the position of the methyl group on the phenyl ring					
6.5	(Insert pictures of developed formula of this original substance)			bstance)		
7	Analytical composition: results of substance analysis carried out from the sample purchased online.			rsis		
7.1	Details of laboratory analysis technique used:  Mean (%) = (sd.= .) (N sample analysed)					
	Webshop	Country (IP address)	(packag e origin)	Form	Substance named on package/web shop	Confirme d substanc es
	1				benzofury	6 APB
	1				Mephedrone	Mephedr one
	2 2					
7.2	Details of lab	oratory and	alysis tech	nique	used:	
7.3	Substance marketing details					
	Powder/crysta	l	Euros			
	minimum price		€12.4			
	maximum price	e per gram	€20			
	mode price pe	r gram	-			
	mean price pe	r gram	€17,36			

	The price marketing for <i>3-mmc</i> substance was provided by one web shop. The discount on offer was applicable only for some sizes of <i>3-mmc</i> .
8	Price and marketing strategies on Czech web shops selling the substance
8.1	
8.2	Description of availability and marketing strategies on Czech web shops selling the substance:  The 3-mmc was available to purchase (28.5.2015) in 4 web shops of 4 web shops where substance was found¹.  Czech web shop marketing analysis indicated one shop which offered discount for orders. The shop offered two discounts. First discount was for new customers only. The average level of first discount was 25%. Second discount was for all customers and all orders. The average level of first discount was 20%.  Free gift was not promoted by any web shop.  Free shipping was offering on one web shop for orders over £100.The guarantee of "free reship" for orders was provided by two web shops. The same day dispatch was supported by one web shop.  Information about 'new' products was mentioned on three web shops.  Loyalty program or Reward Point program for customers was available on one web shop.  Customer reviews was supported on three web shops.

<sup>1</sup> 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 <a href="http://www.i-trend.eu/">http://www.i-trend.eu/</a>).

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.

8.3	Type of Czech websites selling the product			
		No of shops (28.5.2015)		
	RC shops	4		
	Commercial shops	0		
	Other	0		
8.4	Number of webshops available for Czech Republic with supposed country of origin in the EU selling the products			
		No of web shops		
	CZ address or phone number on web sites	1		
	Web shops with CZ IP code	е 0		
	Web shops with supposed country of origin in the EU <sup>2</sup>	4		
9	Law enforcement and	I health data		
_	Number of law enforcement seizures in Czech republic in in 2013/2014:			
9.1	Number of law enforce 2013/2014:			
9.1	2013/2014: In 2013 there was no s			
9.1	2013/2014: In 2013 there was no s 2014 the number was	ment seizures in Czech republic in in eizure reported. On the other hand in		
	2013/2014: In 2013 there was no second the number was second EMCDDA health alerts Confirmed deaths and	ment seizures in Czech republic in in eizure reported. On the other hand in 1/0,648 g of substance.		
9.2	2013/2014: In 2013 there was no second the number was a second to the numbe	ment seizures in Czech republic in in eizure reported. On the other hand in 1/0,648 g of substance.  in Czech republic were none. acute cases reported in Czech republic s well as previous health alerts.  he substance: results from an analysis		
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<sup>2</sup> Including web shops with CZ address or phone number on web sites

- was mentioned on drug forums. (n=1)
- Boosting: Dose of 100 mgs used to prolong desired effects was used twice by one of the users (n= 1)
- Threshold: There was no discussion on threshold dose (n= 0)
- Light: 60-100mgs is also considered as a light dose, which causes a relatively good amount of euphoria.
   Another users confirms that 100mg is not a strong dose and boosting with this amount of drug needs to occur approx. every 30 minutes to have the desired effect (n= 3)
- Common: As common dose that should deliver desired effects 250- 500mg was mentioned. This amount is probably divided into multiple smaller doses due to frequent boosting of this substance. One user reports intranasal using of 3-MMC in doses of 250mgs approx. every 30-45 minutes. Another user reports use of approx. 1g of the substance on one night. (n= 4)
- Strong: 500-750mg dose was reported by one user, these doses are described as strong, causing hallucinations (Spider on a ceiling, bats flying in a room, etc.). This user warns from using such doses as hallucinations may be unpleasant for other users. Another user confirms hallucinations at a strong dose (n= 2)

## 10.2 Duration

- Onset: There was no discussion on specific onset time, apparently the effects come and go very quickly and depend on the ROA (n =0)
- Coming up: 30-45 minutes were estimated as time when effects were coming up until they reached the plateau.
   Other user confirms the shortness of effects that makes a user want to boost the effects(n =2)
- Plateau: It is reached after 30-45 minutes; its duration was not discussed. (n =0)
- Coming down: There was no discussion on coming down (n =0)
- After effects: One user describes no after effects, he could easily fall asleep after the effects withdrew. Other user confirms lack of after effects and ability to fall asleep, he admits a slight dysphoria on the next day, but overall he appreciates the lack of aftereffects. (n =2)
- Hangover/Day after: Slight dysphoria could be felt on the next day, no other after effects were described. (n =1)

10.3	Effects reported by forum users (n = 21)			
	Physical effects			
	<ul> <li>Stimulation and with higher doses pleasant fatigue</li> </ul>			
	Lack of unpleasant cardiovascular			
	complications – felt as "not heavy on heart"			
	Nose burn after snorting			
	<ul> <li>Physical exhaustion after use</li> <li>Psychological effects</li> </ul>			
	High amount of euphoria			
	Talkativeness			
	Better music appreciation			
	<ul> <li>Hallucinations at higher doses</li> </ul>			
	Sought/expected			
	o Euphoria			
	Desired			
	<ul> <li>High euphoria comparing to reasonable amount</li> </ul>			
	of stimulation, talkativeness with very mild after			
	effects			
	Undesired			
	<ul> <li>Hallucinations at higher doses</li> </ul>			
10.4	Tolerance			
	Users report binge-use due to short term effects that are very pleasant. "Sometimes you don't know when to stop and how big your dose will be." Users do not seem to build a tolerance for the specific dose but some of them are tempted by trying higher doses and their effects.			
10.5	Route of administration (n =5)			
	<ul> <li>Ingestion: Two users describe ingestion of substance, dissolved powder in a drink (n = 2)</li> </ul>			
	Snorting: Three users describe snorting of substance. It is considered as painful therefore some intranasal users are asking about ingestion of the substance (n = 2)			
	<ul> <li>Rectal: This ROA of 3-MMC was not mentioned in Czech drug forums (n =0)</li> </ul>			
	<ul> <li>Inhalation or insufflation: This ROA of 3-MMC was not</li> </ul>			
	mentioned in Czech drug forums (n =0)			
10.6	Others substances referred to in discussion about (insert drug name)			
	Referred to in comparing the effects:			

- 3-MMC effects compared to Mephedrone as similar, maybe a little bit softer, some users report that 3-MMC urges less to binge and boost effects, because the boosting does not bring the same effects back like mephedrone did. User with hallucinations at strong dose had the same experience with mephedrone. (n=3)
- 3-MMC compared to methamphetamine, as much softer with shorter effect and few after effects, empathic effect on 3-MMC cannot occur on methamphetamine (n =2)
- 3-MMC compared to MDMA as bringing even more euphoria than MDMA, but it seems as more physically challenging (n=1)
- Hallucinations on strong dose of 3-MMC compared to hallucinations like on ketamine or mushrooms.(n=2)
- Referred to as increasing the effects: Not mentioned on Czech drug forums (n =0)
- Referred to in managing come down: Not mentioned on Czech drug forums (n =0)
- Other substance discussed in the same episode/combo:
   One user reports use of alcohol during 3-MMC use. When dosing alcohol reasonably the experience can be pleasant. (n =1)
- Referred to as an agonist/ antagonist : Not mentioned on Czech drug forums (n =0)

## 10.7 Appearance and preparation (n =3)

Appearance of product from one shop differed from other shop. One shop sold white, crystalic, odor-free substance. Other shop sold beige, chemically-smelling product. But the effects were same according to the users (n=3).

## 10.8 Patterns of use/Frequency of use

- Ranges of use per night varies from 250mgs up to 1g per night (n=3)
- Use of 250-500 mgs twice a week was also reported (n=1)
- Use of 4 grams per month was discussed (n=1)

10.9	Context of consumption	
	• used at home(n=1)	
	Used at work (n1)	
10.10	User's views and experiences on the online market	
10.10	Forum members discussed availability of 3-MMC in online shops, different appearance of the product was discussed too.	
10.11	Harm reduction Message	
	Warning from hallucinations on strong doses (n =2)	
	Warning from possible cardiotoxicity effects, drug-free days for regeneration of body are recommended (n=2). The same works for nose, when users snort 3-MMC. Use of panthenol cream is recommended to prevent damage to the nasal mucous (n=1).	
10.12	User profile	
	Forum users discussing 3-MMC were mostly looking for a reliable	
	supplier of this substance. Some users describe their experiences on	
	substance, some unpleasant effects were highlighted and users	
	warned other people from them. Frequency and amount of use were	
	discussed. Users appreciated the amount of euphoria and lack of	
	stimulation and after-effects. Some of them appreciated empathic and	
	euphoric effect in general comparing to other users that were	
	appreciating stimulating effects of other substances.	
11	Useful resources and literature	
	<ul> <li>http://en.wikipedia.org/wiki/3-Methylmethcathinone</li> </ul>	