



Workstream 5

NPS Top lists and national technical folders

Cross-Country Substance Information sheet on 5-MeO-DALT

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Authors:

Amanda Atkinson (LJMU)
Emma Begley (LJMU)
Dann Van Der Gouwe (TRIMBOS)
Simon Brandt (LJMU)

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I-TREND cross-country Substance Information sheet: 5-MeO-DALT

This technical folder provides information on **5-MeO-DALT** from a European perspective incorporating data from both the UK and The Netherlands. The information provided is based on a number of existing data sources and research undertaken as part of the I-TREND project. Research informing the folder includes an analysis of user discussions on popular UK and Dutch drug forums, an analysis of marketing on popular UK based shops selling the substance, DIMSⁱ data and scientific laboratory analysis of the compound through test purchasing of the substance from UK web shops.

1. Substance name(s)

Chemical name: *N*-[2-(5-Methoxy-1*H*-indol-3-yl)ethyl]-*N*-(prop-2-en-1-yl)prop-2-en-1-amine

Other names (e.g. popular/street/slang name(s)): *N,N*-diallyl-5-methoxytryptamine (EMCDDA, 2015a). Forum users refer to the substance as; 5 Meo, DALT, Meo-dalt-5 and psychedelic crack (n=10). The compound is sold as 5-Meo-DALT and *N*-allyl-*N*-[2-(5-methoxy-1*H*-indol-3-yl)ethyl]prop-2-en-1-amine on UK based web shops.

Branded products

UK drug forum analysis found that users (n=3) purchased a number of brands which contained 5-Meo-DALT, such as Black Mamba and Formula X.

Data from the UK based drug testing organisation WEDINOS (20156) suggests that 5-MeO-DALT was found in numerous branded products along with the stimulant compounds ethylphenidate, alpha-PBP, 5-EAPB, MPA, methoxphenidine, phenylethylamine, caffeine, MDAI. For example, 5-MeO-DALT was found in Project X in combination with methiopropamine and MDAI and also in iMerge in combination with caffeine, ethylphenidate and phenylethylamine. The following branded products have been found to contain 5-MeO-DALT:

NRG-3
DizzleDust ProjectX
B3 Magic Street Magic RedPartMix
B2 iMerge PurpleBombs Extreme BluePartyMix
BansheeDust PurpleBomb NMadcat
MM1 NRG-2 BlueSnowball
Bubble

Note that the contents of brand products can fluctuate and as such it is often unclear which compounds they contain. The varied combinations of substances within individual products may increase potential risks.

Examples of branded product packaging



2. Classification and effect

EMCDDA substance group classification: Indolalkylamine

Substance analysis results: 5-Meo-DALT as an Indolalkylamine was confirmed through the analysis of the compound test purchased from UK web shops. No 5-MeO-DALT samples were handed in by users for the analysis of the compound through our regular testing system at DIMS during 2013 and 2014.

UK drug forum monitoring: UK drug forum monitoring suggests forum users discuss the compound classification of 5-Meo-DALT as part of the tryptamine and psychedelic drug group.

UK web shops marketing: The UK and Dutch web shops analysed within the I-TREND project advertised 5-MeO-DALT as a tryptamine.

3. Legal status and identification of the substance

Legal status/acts/laws in the UK:

An expanded generic definition was created in June 2014 for the control of further tryptamine compounds under the Misuse of Drugs Act 1971 as Class A substances. It was recommended that compounds covered by this definition were also scheduled under the Misuse of Drugs regulations 2001 under Schedule 1. This expanded generic definition brings named drugs such as 5-MeO-DALT under Misuse of Drugs Act 1971.

UK drug forum discussions reported users buying substances in bulk and stocking up on compounds that are at risk of potential ban. Users discussed awareness of proposed controls from the UK Advisory Council for the Misuse of Drugs and the role of the EMCDDA'S Early Warning System in informing decision-making. Users researched such information to inform decisions round bulk purchases before controls were implemented. Users also discussed storing old branded products of now controlled substances which they had no intentions of consuming but stored for nostalgic reasons and as collectors' items.

Legal status/acts/laws in the Netherlands: Presently 5-MeO-DALT is not controlled under any law in The Netherlands. 5-MeO-DALT was under the Medicine Act, but it was decided by the High Court that NPS can no longer be addressed under this law, hence 5-MeO-DALT is presently free to use, sell or manufacture in NL.

EMCDDA Notifications of 5-MeO-DALT

5-MeO-DALT was first reported at the European level by Finnish authorities and notified by the EMCDDA in 2007. It was first reported by the UK National Focal Point in 2010. 5-MeO-DALT has been notified by the EMCDDA within the following EU countries¹ (EMCDDA, 2015a):

Country	Dates
Finland	February 2007
UK	December 2010
Germany	May 2011
Bulgaria	June 2011
Sweden	July 2011
Belgium	August 2011
Hungary	December 2012
Norway	January 2014
French	March 2013
Denmark	May 2013
Cyprus	February 2014
Italy	March 2014
Romania	October 2014
Croatia	December 2014

¹ As of March 2015.

5. Photographs of the substance

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



Images of the substance purchased from UK web shops for laboratory analysis:

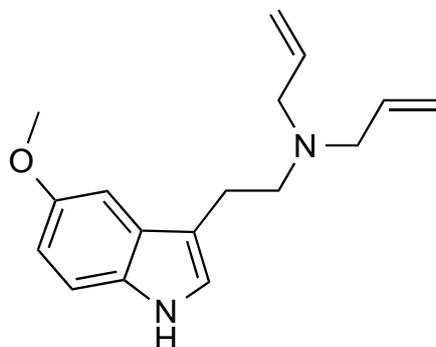


6. Chemistry

Chemical Abstracts Service (CAS) registry number: 928822-98-4, 1174656-32-6 ($\alpha,\alpha,\beta,\beta$ -d₄), 1370252-04-2 (HCl)

Chemical information: other chemical names or variants: 5-Methoxy-*N,N*-diallyltryptamine; *N*-allyl-*N*-[2-(5-methoxy-1*H*-indol-3-yl)ethyl]prop-2-en-1-amine; 5-methoxy-*N,N*-di-2-propen-1-yl-1*H*-indole-3-ethanamine; 5-Methoxy-*N,N*-diallyl-1*H*-indole-3-ethanamine.

Structure (picture of structural formula):



Molecular formula: C₁₇H₂₂N₂O

Molecular Weight: 270.38 g mol⁻¹

Structural comparison with a related substance: 5-MeO-DALT is structurally related to many psychoactive, synthetic and naturally-occurring *N,N*-dialkylated tryptamines.

7. Analytical composition: results of substance analysis carried out on samples purchased online (UK IPIP address web shops)

Details of UK laboratory analysis technique used: Gas chromatography mass spectrometry (GC-MS) and comparison of retention times and mass spectra with reference material.

No 5-MeO-DALT was analysed by the DIIMS laboratory in The Netherlands during 2013/2014. Two samples of 5-MeO-DALT were purchased from two UK web shops (most popular web shops selling the product) over two time periods (December 2013 and January 2014), providing a total of 8 samples.

Web shop	Date of purchase	Form	Substance named on package/web shop	Confirmed substances (%)
1	December 2013	Powder	5-MeO-DALT	5-MeO-DALT (100.27)
1	December 2013	Powder	5-MeO-DALT	5-MeO-DALT (99.44)
2	December 2013	Powder	5-MeO-DALT	5-MeO-DALT (101.69)
2	December 2013	Powder	5-MeO-DALT	5-MeO-DALT (100.53)
1	January 2014	Powder	5-MeO-DALT	5-MeO-DALT (99.97)
1	January 2014	Powder	5-MeO-DALT	5-MeO-DALT (99.87)
2	January 2014	Powder	5-MeO-DALT	5-MeO-DALT (100.92)
2	January 2014	Powder	5-MeO-DALT	5-MeO-DALT (101.70)

Analysis results confirm that 5-MeO-DALT was detected as the main constituent in all analysed samples as indicated on the product label.

8. Price and marketing strategies on UK web shops selling 5-MeO-DALT:

Compound prices: Before the ban came into place, the substance was available in powder form for the following prices.

	British Pounds	Quantity
Minimum price	£7.99	250mg
Maximum price	£675.00	100g

Description of availability and marketing strategies on UK web shops selling 5-MeO-DALT: The substance was found on 2 web shops yet due to a change in law in January 2015 it was not available for purchase on these sites and as such analysis of marketing was not possible. One shop provided information about the law change as a reason for the product not being available, whilst the other labelled the substance as out of stock

9. Law enforcement and health data

Number of law enforcement seizures in the UK in 2013/2014: In the UK, there were 39 seizures in 2013 (EMCDDA, 2013, 2014a) and 2 in 2014 (EMCDDA, 2014b, 201a). No seizures were reported in 2013 and 2014 in The Netherlands.

EMCDDA health alerts: There have been no EMCDDA Health alerts for this.

Fatal and on-fatal intoxication cases reported in the UK

The EMCDDA² report a fatal intoxication of a male known drug abuser in Scotland involving AMT/5-IT, ketamine and 5-MeO-DALT. Complications of α-methyltryptamine/5-(2-aminopropyl)indole, ketamine and 5-MeO-DALT toxicity were reported. The implicated drugs in the death were: A-methyltryptamine/5-(2-aminopropyl)indole, Ketamine, 5-MeO-DALT, the other drugs which were present but did not have a direct contribution to his death were: Lignocaine, Propofol, Thiopentone, Fentanyl, there was no alcohol involved in his death (NPSAD, 2014;EMCDDA, 2015)

² As of March 2015.

10. User experiences of the substance: results from an analysis of discussions in 6 online drug forums

The information below is based on:

- an analysis of 2 UK drug forum containing 4 forum discussions, 216 user posts and among 84 forum users since November 2013.
- an analysis of 4 NL drug forums containing 175 posts on 5-MeO-DALT since January 2013.

Note that the information provided below is based on user perceptions and subjective experiences, and as such should not be viewed as evidence of compound effects. An individual's drug experience is influenced by many factors such as their frame of mind (set), previous experience, their expectations, the use of other substances in combination and the setting and context in which drugs are used. Due to a lack of published research or user reports dosages and onset/duration times should be treated as rough guidelines and are not presented as advised doses. Amounts and duration times below also vary from one individual to the next and due to factors such as ROA and purity.

Dosage specified by drug forum users (n=85 posts)

Initial Dosing (n= 54 posts): Among UK forum users initial dosing reported by online peers ranged from 5mg – 80mg. The most common initial dose was reported between 10-30 mg. Users suggested ingesting no more than 20mg for first time use and reported 10mg to be sufficient to experience desirable effects. Some users reported initially consuming higher doses of between 40mg - 80mg which were considered high amounts. The substance was reported as being active at lower amounts doses of around 5mgs. In the Netherlands, 50 mg was a common initial dose to be used nasally and 1 tablet (40-45 mg) orally.

Boosting (n= 6 posts): Users rarely reported re-dosing but when re-dosing was discussed doses ranged between 20-70mgs. Users also reported re-dosing lower amounts (20mg) several times in one episode. When initial dose was high (60-70mg), only one re-dose was administered. Boosting was not discussed by Dutch Forum users.

Threshold (n=8 posts): Users rarely discussed threshold when dosing 5-MeO-DALT. Administering an allergy test of 4-5mg (the threshold reported on EROWID, 2014). Some forum users discussed active effects between 15-35mg. Threshold was not discussed by Dutch Forum users.

Light (n=21 posts): Some users reported light dosing and desirable effects at 15 mgs, whilst the majority reported first time and desirable dosing to be between 20-35 mgs. 12-35Mmg was the range in light dosage across the 2 countries. Forum users also discussed dosing information from EROWID (2014), which suggested light dosing to range between 5-12mg. However, users discussed doubling this suggested amount based on the perception that EROWID's advice is lower than desired for harm reduction purposes.

Strong (n=28 posts): Strong dosing amounts varied among users and by ROA. Some reported experiencing strong effects from dosing at 25mg (dose amount sourced from EROWID). Strong effects were also reported at 10-20 mg when smoked. The majority of users reported experiencing strong effects between 40-100 mgs. Others reported doses of between 120-500 mg (latter amount being an extreme dose). A small dose was felt to give very strong effects (e.g. 5mg) for 5-10 minutes, Dutch forum user).

Common (n = 14 posts): Users discussed commonly dosing between 30-80 mgs with an exception of one user who reported a common dose of 150mg. Users also referenced EROWID's recommended common dose of 12-25mgs. Common dosing amounts were discussed with regards to achieving the most desirable effects and ranged between 10 – 100mgs (average 50mg for nasal and oral use), with the majority of users reporting most desirable effects between 20-50mgs. Smaller doses were reported for inhalation.

Duration (n = 25 posts)

Onset: Users reported fast on set effects between 10-45 minutes. When smoked much faster acting onset was reported. Within seconds when inhaled.

Coming up: Users reported strong come up effects usually one hour after administration.

Plateau: There was a lack of discussion around plateau. One user reported plateau effects as short acting.

Coming down: Users reported onset of come down to be rather abrupt and occurring 1.5-3 hours after initial administration.

After effects: Few immediate after effects were reported by users, these included: vomiting/stomach upset, ringing noise in the ears, deep concentration, after glow, salty after taste when administered orally and feelings of emptiness and depression.

Hangover/Day after: There was a lack of discussion around hangover/ day after effects. One user discussed experiencing stomach upset 2 days following administration.

Total duration: The total duration of 5-MeO-DALT effects were short and reported to last between 1-5 hours, dependent on ROA and total dosage consumed. The average duration was 2.5 hours.

Effects of 5-MeO-DALT reported by forum users (n = 80 posts)

Note that not everyone will experience all effects listed and that effects are dose dependent and subjective.

Physical effects

- Increased sexual arousal.
- Increase heart rate and body temperature (cold hands and feeling sweaty).
- Increased energy.
- Loss of balance.
- Blurred vision.
- Increased appetite.
- Stomach pain/vomiting.
- Dilated pupils.
- Painful to nose when snorted.
- Sleep deprivation. Some discussed attempting to sleep as 'relaxing'.
- Intense body high. Users describe touching the hair and body as pleasurable.
- Light headedness.
- Jitteriness and shivering.
- Nose drip.

Psychological effects

- Users reported 5-MeO-DALT to have potential addictive effects.
- State of confusion and difficulty concentrating.
- Difficulty with words/speech during conversation.
- Clear, functional thinking.
- One user reported a meditative state following come down.
- Intense body high.
- Increased emotional state of mind/euphoric effect.
- Mild psychedelic effect. Users described this as a 'trippy head space'.
- Time dilation.
- Memory loss (following strong dose of 1 gram. Users advised against this amount).
- Paranoia/anxiety/panic.
- Open eye visual hallucinations.
- Dissociated effects.
- Music enhancement.
- Users reported experiencing a semi-conscious dream state.
- Mild stimulation.
- Depressed and empty feelings following use.

Sought/expected

- Increased sexual arousal.
- Seeking effects similar to MDMA.
- Seeking a research chemical that is neither too weak or comes on too strong in its effects.
- Short acting (fast onset and offset effects).
- Psychedelic like effects.
- Open and closed eye visuals.
- Seeking a research chemical perceived reasonable to consume during a working week.
- One user consumed 5-MeO-DALT after reading incorrect reports that compared it to Mephedrone.

Positive desired effects

- Increased sexual arousal.
- Euphoric body sensations/heightened sense of touch/increased positive mood.
- Open eye visuals.
- Psychedelic/disassociated like effects.
- Short acting (fast onset).
- Smooth and relaxing but stimulating effects.
- Increased appetite.
- Nice afterglow and limited hangover.

Undesired

- Strong come up and an abrupt end to plateau/comedown.
- Increased heart rate and temperature.
- Loss of balance and blurred vision.
- Paranoia/sense of panic/anxiety.
- Addictive potential.
- Stomach upset/nausea.
- Confused state of mind.
- Strong body load, particularly when higher doses are consumed (e.g. 50 mgs).
- Jitteriness and shivering at higher doses (e.g. between 30-40 mgs).
- Painful to insufflate.
- Bitter after taste when taken sublingually.
- Nose drip.
- Feelings of depression and emptiness following use.

Tolerance (n= 7 posts): There was limited discussion tolerance development on UK Drug Forums and non on Dutch forums. Tolerance development of 5-MeO-DALT was rarely discussed. Some users reported tolerance development when consuming every day and when dosing with high amounts. However, tolerance dropped when taking breaks (one day) in between use. There was also speculation that prior consumption of APB's may increase the likelihood of developing tolerance, as one user reported little effects after prior use of APB and then consuming 50 mgs of 5-MeO-DALT.

Route of administration (ROA) (n= 58 posts)

Ingestion: Users reported oral ingestion as their preferred ROA, due to it having more effective desirable effects, lasting longer and also avoiding the undesirable lingering taste created by other ROAs. Oral dosing was recommended at 10mg for novel users. However, it was more common for users to dose 20-50 mgs orally.

Sublingual: Due to the undesirable after taste of 5-MeO-DALT, users were reluctant to consume sublingually. One user did report fast onset effects after dabbing a small amount onto the tongue.

Vaporising/bong: Users found effects from vaporising desirable and effective. Despite an unpleasant flavour, vaping freebase was advised for achieving an overall desirable short duration (around 45 minutes). The usual amount dosed when vaped ranged between 10-20 mgs. Smaller doses were required for vaping compared to oral use due to the fast acting onset of vaping. Some users reported negative effects when vaping, such as feeling anxious and experiencing little to no effects (the purity of the substance was queried in such cases).

Inhalation/ smoking: Users commonly discussed smoking 5-MeO-DALT and this was reported as an effective ROA if users prevented cigarettes burning the compound. Mixing 5-MeO-DALT along with cannabinoids such as 5F-AKB-48 was also commonly discussed as resulting in desirable effects. Users also reported smoking to have fast acting strong effects and strong body load, thus lower dosing amounts were advised (10-20 mgs).

Snorting: Users rarely reported or advised nasally ingesting 5-MeO-DALT due to a burning sensation to the nose and reported preference of oral ingestion.

Other substances referred to when discussing 5-MeO-DALT (n= 46 posts)

Referred to comparing the effects (n= 14 users): Users often compared 5-MeO-DALT to other psychedelics such as 5-MeO-DMT and magic mushrooms (phrased as 'shrooms') and alleged psilocybin like effects. Come up effects and visual hallucinations were compared to a mild magic mushroom experience. Some

discussed avoiding 5-MeO-DALT due to experiencing previous negative (strong) effects when consuming 5-MeO-DMT. Others described effects as similar but slightly better than the 'peak of an AMT trip', giving a similar mind space. Other substances compared included: 4-AcO derivative (psychedelic) (reported as preferable but difficult to access) and MDMA (empathogen/stimulant). Peers advised others that 5-MeO-DALT is not like MDMA or mephedrone (cathinone/stimulant) and therefore similar doses should not be administered.

Referred to as increasing the effects (n= 7 users): Few users discussed direct reference to combining substances which reportedly increased effects. Cannabinoids (commonly 5F-AKB-48 and cannabis) were reported to increase the positive desirable effects of 5-MeO-DALT. Users also reported positive increased effects when combining with MPA (stimulant), 25i/25c NBOMe (psychedelic), APB's (stimulant) or Synthacaine (brand containing stimulants). The NBOMe and APB's were reported to increase the euphoric effects and intensify the body high. One user specifically reported desirable positive effects (described as an 'up all night high') when combining 2AI (stimulant), MPA (stimulant) and 5-MeO-DALT. Some users also reported combining Syrian Rue to deepen and increase sought visual effects.

Referred to managing come down (n= 7 users): Kratom (natural substance with opioid effects), and etizolam (benzodiazepine) were reported as being used to manage comedown. Etizolam was also used when effects of 5-MeO-DALT became too intense and 5-HTP vitamin and mineral supplements to help manage hangovers.

Other substances discussed in the same episode/combo (n= 18 users): A range of substances were reported as being taken in combination during the same episode as 5-MeO-DALT use. Users combining MPA (stimulant) and 5-MeO-DALT, yet reported the pre-made pellets of MPA and 5-MeO-DALT available from online vendors as too strong (50mg MPA and 50mg 5-MeO-DALT). Nitrocaine (stimulant) was also used to reduce pain following snorting. Other substances discussed included 5-IT (stimulant), etizolam (benzodiazepine), 25i/25c NBOMe (psychedelics), APB (stimulant), AMT (psychedelic), (users speculated this was a risky combination), Syrian Rue, AL-LAD (psychedelic), (negatively increased the intensity of the trip), kratom (natural substance with opioid effects), cannabinoids, 2-AI (stimulant), Synthacaine (brand containing stimulants) and coffee (stimulant)(suggested to disguise the taste when ingested). Users also discussed using the branded product 'Black mamba' reported to contain the cannabinoids AM-2201 and 5-MeO-DALT.

Antagonist/agonist (n= 3 users): Etizolam (benzodiazepine) was used when effects of 5-MeO-DALT become too strong or intense.

Note that this substance should not be used in combination with other substances. This includes alcohol. Mixing drugs increases the risk of negative effects.

Appearance and preparation (n= 37 posts): Users discussed purchasing 5-MeO-DALT in either powder (HCL/freebase) or pellet form. Freebase was considered more effective for vaping or smoking and the HCL powder and pellets were commonly reported as more suited for oral consumption (this was not restrictive). Freebase was

discussed as less effective for oral consumption and as such larger doses were consumed when using freebase. Vendor prepared combined pellets, were reported to contain 50mg of MPA and 50mg 5-MeO-DALT, which users perceived as a strong dose, therefore consumed halved pellets. Users often prepared their own gel caps for oral consumption and recommended using calibrated scales to prepare desirable doses. Dissolving 5-MeO-DALT gel caps into a warm acidic drink was reported to be effective in prompting a fast onset. Users also reported mixing the compound into coffee to mask the taste or dissolving it in acetone/acetic acid when preparing oral administration. Vaping and smoking included the use of bongs and foil and preparing the compound into a cannabinoid (5f-AKB-48) blend.

Patterns/Frequency of use (n= 23 posts): There was no distinct pattern of use. Users reported consuming 5-MeO-DALT on a regular recreational basis and others irregularly. Patterns of use varied between everyday consumption (less frequent due to trippy effects), 2-3 times a week, once every 2-3 weeks, at weekends only and a few times a year. Users who consumed on consecutive days did so due to little tolerance development. However, when tolerance did develop, users discussed reducing dosage and having breaks in between use in order to help maintain desirable dosage and effects. Some discussed experiencing undesirable effects (e.g. no visuals/nausea) and reported no desire to consume further. After first time consumption, new users reported the desire to consume again.

Context of consumption use (n= 34 posts): Users commonly reported consuming 5-MeO-DALT during the evening and at home in the company of friends. Consumption was also discussed in nightclub environments where users prepared and took along their own gel capsules. The context in which users consumed at home was reported prior to meals, when watching television and before bed time. Some used during the day and evening, and others used on a weekday evening ('school night') due to the short duration of the effects.

User's views and experiences on the online market use (n= 28 posts)

There was much discussion of user experiences with online vendors. Positive aspects of online purchasing included quick next day delivery, vendor and customer communication regarding queries, product availability and price. Negative experiences were also reported including concerns over the purity of a particular batch in distribution, having to cancel orders due to vendor mistakes and user concerns over branded products and uncertainty of what they contain. Users relied on peers' positive experience of online vendors as advice in selecting vendors and reported switching vendors following negative experiences. Vendors were reported as stocking 5-MeO-DALT in powder form, ranging between 250mg, 500mg and 1g. Users suggested buying powder and self-preparing gel caps using calibrated scales to reduce costs. Users also discussed disappointment that the smallest amount available was sold at 250mg, as smaller doses were preferred.

Warnings and harm reduction advice provided by online peers (n= 40 posts, n= 31 users)

Lack of data and research (e.g. toxicity and effects) on NPS means it is difficult to provide specific harm reduction advice. The information below is based on user perceptions, and as such should not be seen as scientific evidence of potential harms and related advice.

There was inadequate harm reduction advice provided on drug forum discussions of 5-MeO-DALT to provide a comprehensive overview of specific harm reduction for this compound. However, general Harm Reduction advice can be applied to the use of 5-MeO-DALT.

Particular attention should be given to the following negative effects:

- Addiction potential.
- Increased heart rate.
- Increased temperature.
- Stomach pain/vomiting.
- Insomnia/ affects sleep patterns.
- Pain to nose when snorted.
- Loss of balance.
- Memory loss (following strong dose of 1 gram. Users advised against this amount).
- Paranoia/anxiety/panic (in large doses)
- Depressed feelings following use.
- A possible fatal-intoxication in which 5-EAPB was found in a biological sample is reported by the EMCDDA.

The following advice was provided:

- Conduct an allergy test before dosing (2mg).
- Start with a low dose (especially new users). Doses should be increased with caution.
- Try not to consume high/strong doses. Strong/negative effects are reported with large doses.
- Carefully control the quantities taken during one drug using session. Preparing and planning correct dosage amounts beforehand helps to avoid extreme dosing and possible negative effects.
- *Use calibrated scales to measure appropriate doses.*
- High/strong doses are not recommended. Strong/negative effects are reported with large doses.
- Time should be given for previous doses to wear off before re-dosing. If desired effects were not achieved, users were advised to abstain or use smaller doses due to risk of overdose.

- Smoking and nasal administration were reported as inducing strong effects, this lower doses for these ROAs was advised.
- Oral administration of gel caps was reported to take a little longer to induce effects and increased the possibility of nausea and stomach pain. Come up and plateau effects were also reported to come on quite strong with this ROA.
- Caution should be taken when using brands advertised as containing the substance as they may not contain the substances listed on packaging.
- Oral dosing was recommended over nasal ingestion due to pain experienced when snorted.
- *Be aware that the information provided online and on packaging may be incorrect.*
- Be aware that the substance(s) purchased or brand(s) purchased may not actually contain the substance(s) described on packaging.
- Use in a safe and controlled environment and when in a positive mind set.
- Research the purity and form (e.g. freebase or HCL) of the substance ordered and use reliable sources (e.g. pictures, smell and melting point reports) to compare with the product received.
- Substances produce different individual effects. As such, doses for one substance should not be applied to another. Avoid comparing dosing amount with previous experience of other compounds.

The following generic advice should also be considered in order to reduce any potential harm (HIT; 2013; Scottish Drugs Forumⁱⁱ, 2014a, b, c, d):

- Psychedelics like have powerful effects and therefore should not be considered 'light' drugs. There is always potential for undesirable or negative experiences.
- Make sure the environment/setting in which the drug is taken is safe and comfortable for the duration of the trip experience. Setting includes the physical surroundings, music, using alongside trusted company and removing any potentially dangerous objects e.g. knives from the environment.
- Try to resist re-dosing over long periods.
- As each chemical compound is individually different, do not push dosing limits in order to try and achieve effects similar to other substances.
- Do not combine with other substances. This includes alcohol.
- Have adequate breaks between use as this will allow the body to recharge.
- Do not use alone. Use in the company of trusted friends.
- Inform someone what substance has been taken.
- Use in the company of a non-user (e.g. a 'sitter').

- *Building a knowledge base of the substance to help make more informed decisions about a substance. Use reliable sources.*
- If prone to anxiety or if there is history of mental health problems, avoid using.
- Despite loss of appetite, try to consume food and water whilst using.
- Drink plenty of water to avoid dehydration, taking small, regular sips to replace fluid that is lost by sweating.
- Carry condoms/dams to practice safer sex.
- Medical support should be sought quickly if negative side effects are experienced.
- If experiencing extreme increase of heart rate or the user feels panicky, find a calm environment and try to slow down breathing.
- Substances sold as 'legal' on-line and in 'head-shops' may actually be, or contain, controlled drugs. Manufacturers and retailers may not always be aware of the identity and legality of their products.

References

EMCDDA (2013). UK Progress report 2013. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Lisbon, Portugal.

EMCDDA (2014a). UK Annual report 2013. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Lisbon, Portugal.

EMCDDA (2014b). UK Progress Report 2014. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Lisbon, Portugal.

EMCDDA (2015a). European Database on New Drugs (EDND). "5-MeO-DALT". European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Lisbon, Portugal.

EMCDDA (2015b). UK Annual Report 2014. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Lisbon, Portugal.

HIT (2013) The Deal on Legal Highs. Liverpool: HIT

National Programme on Substance Abuse Deaths (NPSAD) (2014) Data provided for I-TREND on Deaths involving specified Novel Psychoactive Substances reported to the National Programme on Substance Abuse Deaths (NPSAD). London: St Georges Hospital

WEDINOS (2015) Data provided by WEDINOS on samples containing 2-AI. WEDINOS: Public Health Wales and the Welsh Government.

Indicative literature

The list below provides examples of suggested further reading collected through a systematic search of scientific databases for literature relating to the compound 5-MeO-DALT.

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ⁱ DIMS is the Dutch national network of testing facilities illicit drugs that furthermore aims at gaining an insight into the market of controlled substances. DIMS is embedded within the Trimbos Institute and is funded by the Ministry of Health (VWS).

ⁱⁱ Scottish Drugs Forum is a drugs policy and information organisation providing resources on drug issues. <http://www.sdf.org.uk/>