LIFTMODE

LIFTMODE
47 W. Polk St. STE 100-241
Chicago, IL 60605

liftmode@liftmode.com
www.liftmode.com

CERTIFICATE OF ANALYSIS

Oleamide

(Oleic acid amide)

Material Lot #:	20170310	Manufacture Date:	03/10/2017
Country of Origin:	China	Expiration Date:	03/10/2020

Analysis	Claim	Result
Total Fatty Acid Amide	≥98.0%	98.8%

Test	Specification	Result
Appearance	Small round pearl or powder	Complies
Melting Point	17-76° C	74.2° C
Amide content	≥95%	98.8%
Acid Value	≤0.8 mg KOH/g	0.38 KOH/g
Iodine Value	80-95 gI_2/100g	85.12 gI_2/100g
Color (hazen)	≤400	100
Moisture (wt%)	≤0.1	0.012

Oleamide should be ***refrigerated*** in a tightly sealed durable container.
Oleamide should be protected from excess heat, direct sunlight, excess humidity and moisture.
Oleamide has a stable shelf life of 2 years from the date of manufacture when properly stored.

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Product Name	Oleamide	Client Lot Number	20170310
Report Date	04/17/17	Laboratory #	8483

Test	Method	Result
Oleamide	HPLC	66.6%
Total Fatty Acid Amide Content	HPLC	99.3%
Lead	ICP-MS USP <730>	0.442 ppm
Arsenic	ICP-MS USP <730>	0.017 ppm
Cadmium	ICP-MS USP <730>	0.049 ppm
Mercury	ICP-MS USP <730>	<0.001 ppm
TPC	Biolumix	<100 CFU/G
Yeast and Mold	Biolumix	<100 CFU/G
E.coli	Biolumix	<10 CFU/G
Coliform	Biolumix	<10 CFU/G
Salmonella	Biolumix	Negative

Collin Thomas
Laboratory Manager

04/17/2017 4/17/17
Date

Oleamide

- **Oleamide is known to accumulate in the brain prior to sleep and in states of sleep deprivation**
- **Effects and benefits of oleamide include supporting healthy stress levels, promotion of healthy sleeping patterns as well as an increase in appetite**
- **Dosage is normally anywhere between 50-200mg daily, depending on the desired effects**
- **It is not advised to drive or operate machinery when under the influence of oleamide**

Background

Oleamide is a relatively new Nootropic that occurs naturally in animals and is produced in humans from Oleic Acid (from Olive oil) and ammonia. It has been seen to accumulate in the central nervous system (CNS) before sleep, producing calming and tranquilizing effects. It is naturally metabolized by an endogenous enzyme known as FAAH.

Oleamide is associated with an increase in GABA signals (known to produce calming and sedating effects) as well as an increase in appetite. At higher doses it may produce depression in locomotion (associated with effects on GABA neurotransmissions) and bring on restful sleep. Sleep latency (the time from wakefulness to sleep) is reduced at all doses. Oleamide is sometimes sold in powder form, and is also included in some cosmetics as oleamide DEA.[1]

Oleamide benefits / effects

Calming

While the calming effects of oleamide are still being researched, preliminary studies on animals have shown strong support of healthy stress levels and mood increases, which look promising.

Firstly, research has shown that oleamide is able to increase GABA signalling (specifically $GABA_A$ subtypes) without actually interfering with the GABA receptors.[2] This is important because GABA is known to be the primary inhibitory neurotransmitter in the central nervous system and is associated with calming, anti-stress and pain relief effects. $GABA_A$ is specifically targeted in many tranquilizers and sedatives and an increase in $GABA_A$ activity is directly linked to calming effects.[3]

Secondly, studies on rats have shown that oleamide is able to exert mood-lifing effects on animals in doses that are too low to create locomotive effects (5mg/kg bodyweight). The support of healthy stress levels and social calming effects of intravenous oleamide were seen to last for 30-60 minutes.

Thirdly, animals studies have shown the potential effects of large doses of oleamide (10mg/kg bodyweight) in treatment of depression. Animal studies showed greater results in tests designed to test for depression in mice and rats treated with intravenous oleamide. The mechanisms behind these effects are still being examined.[4]

Promotion of healthy sleep and memory

Recent research into the effects of oleamide in animals showed that intravenous doses resulted in a dose-dependent decrease in sleep latency (time to fall asleep), reduction in locomotion and a decrease in body temperature. With the onset of sleep, the research showed a depression in locomotion. This was shown to be reversible by using serotonin supplements, so that sleep would be induced without any apparent effects on locomotion ability.[5]

Human trials are still required, but searching online databases for reports, reviews and experiences seems to testify to the strength of this chemical to induce restful sleep.

Oleamide is known to enhance the signals of GABA (see above) through an unknown mechanism. Enhanced GABA function is associated with calming and promotion of sleep. Many Nootropic chemicals that produce calming or sleep-aid effects target GABA receptors. This may also be a cause of the locomotive disruptions seen in animal tests. Alcohol is an example of a $GABA_A$ agonist (increases GABA transmissions) - as well as many sedatives and tranquilizers – and is definitely associated with impaired locomotive function at higher doses.

Oleamide has been shown to be able to reduce the effects of long-term potentiation (LTP) which may be a causal agent in the development of diseases like Alzheimer's, depression and even epilepsy.[6]

Increased appetite

Oleamide is known to increase appetite in animal studies and reports and reviews by users online appear to back these findings. In a recent animal study, food intake was shown to have increased significantly 3hrs after oleamide supplementation.[7]

Furthermore, oleamide has been observed to interact with endogenous cannaboid receptors – specifically CB1 at high concentrations. This may give oleamide possible psychoactive effects at high doses, and may also be an explanation for the increased appetite observed a few hours after dosing.

Lastly, oleamide has shown anti-neuroinflammatory effects which may protect the brain and may also be associated with its proposed ability to bind to multiple neurotransmitter systems, including cannaboid receptors.[8]

Oleamide recommended dosage