FACT SHEET

A selection of internet-based information

3-amino-1-phenyl-butane
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A. General information

Recent collected sample in Belgium

Substance: 3-amino-1-phenyl-butane
Date of collection: 14/11/11
Date of analysis: 24/11/11
Product type: Powder
Color: white
Shape:
Weight
Diameter:
Thickness:
Logo:
Location: Antwerp
Pictures

From EMCDDA’s reporting file

Substance: 3-amino-1-phenyl-butane

Created
December 2011

Updated
December 2011

Type
Psychotropic substances

Group
Others

Name
3-amino-1-phenyl-butane

Nature of substance
3-Amino-1-phenyl-butane is structurally related to amphetamine, although it does not strictly belong to the phenethylamine chemical family. It is likely to exhibit sympathomimetic activity but at a lower potency as compared to amphetamine (active at higher dose). It is a metabolite and a precursor of Labetalol, a alpha/beta adrenergic antagonist which is used to treat high blood pressure and angina pectoris, and whose teratogenicity has been studied in animals. It is also a doping metabolite.

Systematic chemical name
3-amino-1-phenyl-butane
Other names
Homoamphetamine; 1-phenyl-3-amino-butan; 4-phenylbutan-2-amine; α-Methyl phenethylamine; α-Methylbenzenepropanamine; α-Methyl-γ-phenyl-n-propylamin

Alerts
No Alerts

Reports to EMCDDA

Belgium (Reporting Form): On 12 December 2011 the NFP reported a collected sample of white powder. The experienced user thought to have bought speed, but got some side effects after taking a regular dose. This lead him to give a sample to Free Clinic to have it analysed, on 14/11/2011. The person got a tight feeling on his chest and difficulties breathing. In the sample no methamphetamine, amphetamine or MDMA were found.

Poland (Other): In June 2009 the NFP informed that alpha-metylbenzenepropanamine has been identified by their Forensics.

United Kingdom (Other): On 12 December 2011 Dr Les King informed that: "A single example (1-phenyl-3-butanamine, also known as homoamphetamine) has been encountered where the amino group is more distant from the phenyl group." This single case arose in London some time around 1995, but certainly before the Joint Action started in 1997 and was therefore never mentioned to EMCDDA. (Drug Abuse Trends (Forensic Science Service), No. 111, page 14 (January-March 1996) (see annex)

Information from international partners
Information from EMEA

Information from other partners / institutions / countries

Assessment status in the UN system

Uses & Risks
Modes and scope of the established or expected use

Health risks

**Pharmacology:** In phenylalkylamines, for optimum activity, the N-atom needs to be separated from the phenyl ring by two carbon atoms; in 3-amino-1-phenyl-butane, the amino group is more distant (three carbon atoms) from the phenyl group. Although some studies suggest that 1-phenyl-3-butanamine is inactive as a stimulant upon intraperitoneal administration to mice [van der Schoot et al, 1962; Biel and Bopp, 1978], according to other papers [Barger and Dale 1910/11, Fellows and Bernheim, 1950], the substance is likely to exhibit sympathomimetic activity but at a lower potency as compared to amphetamine (active at higher dose).

Social risks

Other uses
B. Pictures

Not available

C. Experiences of users

The experienced user thought to have bought speed, but got some side effects after taking a regular dose. This lead him to give a sample to be analysed. The person got a tight feeling on his chest and difficulties breathing.

D. Legal status

*From EMCDDA*

No information

*Belgium*

Not controlled

E. References


Fellows E. J. and Bernheim F., The Effect of a Number of Aralkylamines on the Oxidation of Tyramine by Amine Oxidase, JPET September 1950 vol. 100 no. 1 94-99
F. Chemistry

Other chemical names and variants

Chemical Abstracts Service (CAS) registry number
22374-89-6

Molecular information

Molecular structure:

Molecular formula: C10H15N

Molecular weight: 149.23

Synthesis, manufacture and precursors

The synthesis of Labetolol involves homoamphetamine as one of the key precursors (N-alkylation with the properly substituted alpha-bromoketone).

Physical description

Identification and analytical profile

• c13spectrum.pdf
  Another NMR spectrum kindly provided by the Belgium NFP
• **GCMSspectrum.pdf**
GCMS spectrum kindly provided by the Belgium NFP
• protonsppectrum.pdf
NMR spectrum kindly provided by the Belgian NFP
Name: Benzenepropanamine, alpha.-methyl-
Formula: C_{14}H_{19}N
MW: 149 CAS#: 22374-89-6 NIST#: 236590 ID#: 13463 DB: mainlib
Contributor: Japan AIST/NIMC Database- Spectrum MS-NW-6644
Synonyms:
1. 3-Amino-1-phenylbutane
2. alpha.-Methylbenzenepropanamine
3. 1-Methyl-3-phenylpropylamine
4. 1-Phenyl-3-amino-butane
5. 4-Phenyl-2-aminobutane
6. Propylamine, 1-methyl-3-phenyl-
7. 3-Phenyl-1-methylpropylamine
8. Propylamine, alpha.-methyl-gamma.-phenyl-
9. 1-Phenyl-3-amino-butane
10. alpha.-Methyl-gamma.-phenyl-N-propylamin
11. alpha.-Methyl-gamma.-phenyl-N-propylamine
PHARMACEUTICAL AND OTHER DRUGS

(a) Almost 100,000 tablets containing ketamine, ephedrine and procaine were seized in Shropshire. Apart from ‘bird impressions’, several new forms were present including white and purple heart-shaped tablets as well as round white tablets bearing an impression variously described as a stylised ‘?’ or a tornado.

As noted previously, some illicit ketamine tablets have been found to contain selegiline, a drug normally used (as ELDEPRLY) in the treatment of Parkinsonism. Although selegiline is a metabolic precursor of both amphetamine and methylamphetamine, it is possible that it has been added to illicit tablets because of its properties as a monoamine oxidase inhibitor. In this capacity, selegiline could reduce the metabolic destruction of ketamine and other drugs.

(b) Further cases of 4-bromo-2,5-dimethoxyphenethylamine (2C-B, NEXUS) have appeared. Powders containing 2C-B mixed with amphetamine were found in paper wraps marked “Happ-E-Daze” and “Pure - Take with water, one dose”. Each wrap typically contained 100mg of powder of which the 2C-B comprised approximately 10mg.

(c) A report in the British Medical Journal (1995; 311: 1502) has claimed that some clients at a drug treatment centre were misusing the antidepressant drug dothiepin to produce euphoria and visual and auditory hallucinations. In 1995, dothiepin was found in ten seizures reported to DIL.

(d) In February, the Wetherby Laboratory reported the first case in the UK involving methcathinone (ephedrone). The exhibit consisted of twelve wraps of off-white powder with a total weight of 16.7g. Methcathinone is expected to be listed under the Misuse of Drugs Act as a Class B controlled drug.

(e) Reports from Germany have described abortive clandestine attempts to manufacture 2,5-dimethoxy-4-(n)-propylthiophenethylamine (2C-T-7), other 4-alkylthiophenethylamines, and 4-allyloxy-3,5-dimethoxyphenethylamine. These drugs are structurally related to 2C-B (see above) and are believed to have similar potencies and hallucinogenic effects.

(f) Although not reported in the UK, the Drug Enforcement Administration in the USA has described the abuse of tablets containing ephedrine and up to 200mg dextromethorphan. The latter substance is normally used as a cough suppressant in doses of 10mg, but large amounts are believed to exert ketamine-like effects.

(g) A further case involving 1-phenyl-3-butanamine (homoamphetamine) was reported by the Chorley Laboratory in the form of a tablet marked with a bird impression, and also containing caffeine.

(h) The Aldermaston Laboratory received white tablets bearing a bird impression containing only calcium sulphate (Plaster of Paris). The Metropolitan Police Laboratory reported ACTIFED tablets (a proprietary antihistamine preparation) marked with a $ (dollar) impression.

(i) There have been several enquiries, often with a S. African connection, for export of the methaqualone precursor, isatoic anhydride. This substance is a non-restricted alternative to the internationally-controlled N-acetylanthanilic acid.