FACT SHEET

A selection of internet-based information

DMAA

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The aim of this fact sheet is to inform professionals working in the drugs field about the characteristics of an illegal substance. It is a service to laboratories, hospitals and other partners who collaborate in the Belgian Early Warning System. The fact sheet is a selection of information available on the internet, using sources that we perceive as being reliable. Corrections and suggestions for internet sources are welcome.
## A. General information

*From EMCDDA’s reporting file*

**Created**
May 2010

**Updated**
June 2010

**Type**
Psychotropic substances

**Group**
Others

**Name**
DMAA

**Nature of substance**
Dimethylamylamine (DMAA) is a simple aliphatic amine, with stimulant properties. It is reported to be used as food dietary supplement and also as a nasal decongestant, treatment for hypertrophied or hyperplasic oral tissues and general purpose stimulant. It may occur naturally as a component of the oil extracted from the geranium plant.

**Systematic chemical name**
4-methylhexan-2-amine

**Other names**
1,3-dimethylamylamine, Forthan, Forthane, Floradrene, Geranamine

**Alerts**
No alerts

**Reports to EMCDDA**

**Ireland (Reporting Form):** In June 2010 the Irish NFP informed on the identification of DMAA in the following head shop products: Red E, Redd Hearts, Iced Diamonds, Vegas Nights, Blessed, Energy, Go E, Bliss Bomb, Dr Feelgood, Pinkys, Nemesis, Embrace, Diablo. The products (in the form of tablets or capsules) also contained caffeine and/or 2-phenethylamine (2-PEA).

**Chemistry**

**Other chemical names and variants**
4-methyl-2-hexanamine; 4-methyl-2-hexylamine; 2-amino-4-methylhexane; 1,3-dimethylamylamine; 1,3-dimethylpentyamine
Chemical Abstracts Service (CAS) registry number
105-41-9

Molecular information
Molecular structure:

\[
\text{NH}_2
\]

Molecular formula: \( \text{C}_7\text{H}_{17}\text{N} \)

Molecular weight: 115.22

Melting point: 120 - 130 °C (hydrochloride)

Uses & Risks

Health risks

DMAA is is considered a pressor amine, i.e. one of several products of intestinal putrefaction believed to cause functional hypertension when absorbed, any alkaline substance that raises blood pressure. Normal use probably is not expected to greatly affect blood pressure, but in combination with MAO deficiency or MAO inhibitors, there is a risk blood pressure may rise to a critical level.

Pharmacology: A clinical study on four volunteers [Marsh, Howard and Herring. J. Pharmacol.Exp.Ther. 103 (1951) 325-329] reports on the comparative pharmacology of the isomeric nitrogen methyl substituted heptylamines: 'About 45 minutes to one hour after the oral administration in man of 3 mg, the blood pressure begins to rise, the systolic-diastolic difference increases, and the pulse rate decreases. The subjects complain of feeling hot or cold, that the skin tingles or itches, that there is a peculiar taste in the mouth or that the mouth is dry or the nose feels open. Pilomotor skin reactions are common. Mental confusion and inability to concentrate occasionally occur, no evidence of central nervous stimulation as evidenced by excessive talkativeness is found.'

Publications

B. Pictures

Not available

C. Experiences of users

No information available

D. Legal status

No information

E. References