

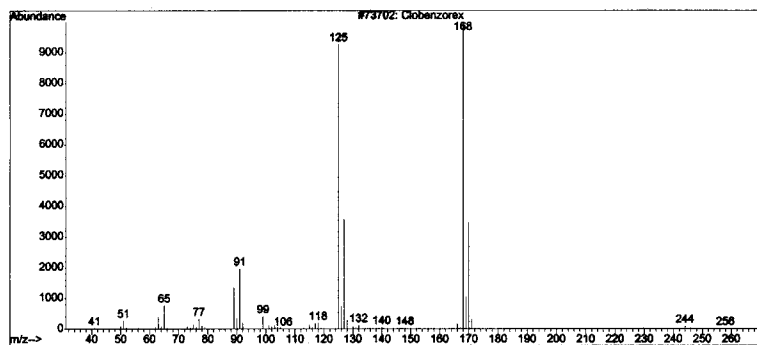
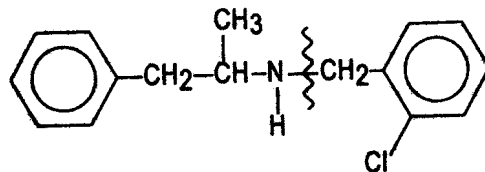
Clobenzorex (Asenlix®, Dinintel®, Finedal®)

General

Clobenzorex is a relatively new anorectic drug that has been cited in the literature the last couple of years. It is not available in the United States, but is available in other countries such as Mexico, Spain, Argentina, and France. Clobenzorex is manufactured by Hoechst Marion Roussel as a 30 mg capsule, dark/light green in color and marked with HMR. Clobenzorex metabolizes to d-amphetamine and has amphetamine-like central stimulant behavioral properties.

Chemical

- Clobenzorex Hydrochloride
 - (+)-N-(2-Chlorobenzyl)-alpha-methylphenethylamine hydrochloride
 - C₁₆H₁₈ClN-HCl
 - Formula weight 296.2
 - Molecular weight 259.5
 - CAS Registry No. 13364-32-4 (Clobenzorex), 5843-53-8 (Clobenzorex HCl)
- Clobenzorex is a basic drug and can be extracted with an n-butylchloride liquid/liquid extraction and an acid back extraction. According to the literature, it also can be extracted and derivitized very similar to amphetamine/methamphetamine or similar type compounds.
- Detection of clobenzorex is possible on either a GC/NPD or GC/MS.



Ions: 168, 125, 170, 127, 91, 244, 258
m/z

Relative retention time of Clobenzorex (0.8558/Carbinoxamine) to other commonly encountered basic drugs are as follows:

Phencyclidine, Doxylamine, Tramadol, **CLOBENZOREX**, Chlorpheniramine, Cyclizine, Metoprolol

Pharmacology

- Symptoms include dry mouth, significant excitation, increase alertness and difficulty sleeping.
 - Approximately 20 times less potent than (+)amphetamine
 - 20% of a dose can be accounted for (after 24 hrs) as d-amphetamine or amphetamine metabolite.
 - Principal metabolites excreted in urine of rats: 40% glucuronide, 5% amphetamine, 3% p-hydroxyamphetamine.
 - Clinical studies
- | | Urine C _{max} (ug/ml) | |
|-----------------------|--------------------------------|---|
| | Clobenzorex | Amphetamine |
| Single 30 mg dose | 0.029 | 2.47 - Detectable for up to 116 hours post dose |
| 30 mg dose for 7 days | 0.047 | 4.7 |

Case Study (Los Angeles County Dept. of Coroner)

Professional jockey found unresponsive at home with numerous pills, including Clobenzorex.

Toxicology results (partial)-ug/ml or ug/g

	<u>Clobenzorex</u>	<u>Amphetamine</u>	<u>Methamphetamine</u>
Heart Blood	1.9	3.1	0.84
Femoral Blood	QNS	1.3	0.50
Bile	14	15	4.7
Liver	174	15	2.6
Gastric	4.9 mg	0.22 mg	0.12 mg
Urine	1.3	2.0	4.8

References

- Young R., Darmini N., Elder E., Dumas D., Glennon RA. Clobenzorex: Evidence for Amphetamine-Like Behavioral Actions. *Pharmacology Biochemistry and Behavior*, 1999;56 (2):311-316.
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- San Diego County Sheriff's Crime Laboratory. Clobenzorex. *Microgram*, 1999;XXXII (6); 183-184.
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- Baden K., Valtier S., Cody JT. Metabolic Production of Amphetamine Following Multidose Administration of Clobenzorex. *J Anal Tox*, 1999;23:511-516