#### Mefenorex Hydrochloride (USAN, pINNM) ⊗

Hidrocloruro de mefenorex; Méfénorex, Chlorhydrate de; Mefenorexi Hydrochloridum; Ro-4-5282. N-(3-Chloropropyl)- $\alpha$ -methylphenethylamine hydrochloride.

Мефенорекса Гидрохлорид

 $C_{12}H_{18}CIN,HCI = 248.2.$ 

CAS 17243-57-1 (mefenorex); 5586-87-8 (mefenorex hydrochloride).

ATC — A08AA09.

ATC Vet - QA08AA09.

#### **Profile**

Mefenorex hydrochloride is a central stimulant and indirect-acting sympathomimetic with actions similar to those of dexamfet-amine (p.2153). It has been used as an anorectic in the treatment of obesity although stimulants are no longer recommended for this indication. Regulatory authorities in the EU have called for the withdrawal of all anorectics from the market (see under Effects on the Cardiovascular System in Fenfluramine, p.2156).

### Mesocarb (rINN) ⊗

Mésocarb; Mesocarbom.  $3-(\alpha-Methylphenethyl)-N-(phenylcarbamoyl)$ syndnone imine.

Мезокарб

 $C_{18}H_{18}N_4O_2 = 322.4$ . CAS — 34262-84-5.

### Profile

Mesocarb is reported to be a central stimulant.

# Metamfetamine Hydrochloride (rINNM) ⊗

 $d ext{-}Deoxyephedrine Hydrochloride;}\ d ext{-}Deoxyephedrine Hydrochloride;}\ Hidrocloruro de metanfetamina;}\ Métamfétamine, Chlorhydrate de; Metamfetamini Hydrochloridum; Methamphetamine Hydrochloride; Methamphetamini Hydrochloridum; Methylamphetamine Hydrochloride; Phenylmethylaminopropane Hydrochloride. (+)-N,<math>\alpha$ -Dimethylphenethylamine hydrochloride.

Метамфетамина Гидрохлорид

 $C_{10}H_{15}N,HCI = 185.7.$ 

CAS — 537-46-2 (metamfetamine); 51-57-0 (metamfetamine hydrochloride).

ATC. — N06BA03.

ATC Vet — QN06BA03.

(metamfetamine)

NOTE. The following terms have been used as 'street names' (see p.vi) or slang names for various forms of metamfetamine: 20/20; 222; Agua; Albino Poo; Alffy; All tweakend long; Amp; Anny; Anything going on; Bache knock; Bache rock; Bag chasers; Baggers; Barney dope; Batak; Bathub crank; Bato; Batu; Batu kilat; Batunas; Batuwhore; Beannies; Beegokes; Bianca; Bikerdope; Billy; Bitch; Biznack; Black; Black beauty; Blade; Blanco; Bling; Blitzard; Blue acid; Blue belly; Blue devils; Blue funk; Blue meth; Bomb; Bombita; Bombitas; Boo; Booger Boorit-Cebuano; Boo-Yah!; Brian Ed; Brown; Buff stick; Bugger sugar; Buggs; Bump; Bumps; Buzzard dust; Caca; Cale Gerst; Candy; Cankinstien; Cartwheels; CC; ChaChaCha; Chalk; Chalk; Chalk dust; Champagne; Chank; Cheebah; Cheese; Chicken; Chicken feed; Chicken flippin; Chikin; Chim

ichanga; Chingadera; Chittle; Chizel; Chiznad; Choad; Chris; Chrissy; Christal; Christina; Christine; Christmas tree; Christy; Cinnamon; Clavo; Clear; Coco; Coffee; Colorado Rockies; Cookies; CR; Crack Whore; Crank; Cranster Gansters; Cri, cri; Criddle; Criddy; Cringe; Crink; Crip; Cris; Crisco; Crissie; Crissy; Cristina; Cristy, Critty, Crizzy; Croak; Crossles; Crothch dope; Crow; Crunk; Crypto; Crystal; Crystal glass; Crystal meth; Crystal methadrine; Crystalight; Crystals; Cube; D; Debbie; Desocsins: Desogtion: Devil dust: Devils dandruff: Devils drug: Dingles; Dirt; Dirty; Dizzy D; D-Monic; Do da; Doody; Doomy-lau; Dope; Drano; Dummy dust; Dyno; El Gato Diablo; Epimethrine; Epod; Eraser dust; Ethyl-M; Evil yellow; Fast; Fatch; Fedrin; Fil-layed; Fizz whizz; Fizz Wizz; Flash; Fluff; Future; G; Gackle-a Fackle-a; Gab; Gak; Gas; Gear; Geek; Geep; Geeter; Gemini; Get geared up; Getgo; Glass; Go; Go-ey; Go Fast; Go-fast; Go-go; Go-go juice; Gonzales; Goop, Go Pills; Goose-Egg; Got anything; Grads; Granulated orange; Grit; Gumption; Gyp; Haiwaiian salt; Hank; Hanyak; Hard Crystal; Hawaiis finest; High speed chicken feed; Highthen; Hillbilly crack; Hippy crack; Hironpon; Hiropon; Holy Smoke; Homework; Hoo; Horse mumpy; Hot Ice; Hydro; Hypes; Ibski; Ice; Ice cream; Icee; Ink; Ish; Izice; Jab; Jasmine; Jenny Crank; Jenny Crank Program; Jet fuel; Jetfuel; Jib; Jib nugget; Jibb Tech Warrier; Jibber jabbin; Jinga; Juddha; Juice; Junk; Kaksonjae; Kibble; Killer; KooLAID; Kryptonite; L.A.; LA Glass; L.A. glass; la glass; L.A. ice; LA Ice; Lamer; Laundry detergent; Leapers; Lemon drop; Life; Lily; Linda; Linga; Load of Laundry; Lost weekend; Love; Low; Lucille; M man; Magic; Maui-wowie; Meth; Meth amps; Meth monsters; Methaine; Methandfriend; Methandfriendsofmine; Methanfelony; Methatrim; Methedrine; Methlies Quik; Methmood; Method; Mexican crack; Minibennies; Motivation; Motorcycle crack; Moving on G; Nazi crank; Nazi dope; Nazi vitamens; Nazimeth; Ned; Newday; No doze; Nose candy; On a good one; Orange; OZs; P; Patsie; Peaking; Peanut butter; Peel dope; Pervatine; Pervitin; Phazers; Phets; Philopon; Pieta; Piko; Pink; Pink elephants; Pink hearts; Poison; Poof; Poop; Poop'd out; Poor man's coccaine; Poor man's coke; Poot; Pootananny; Poppers; Powder; Powder monkeys; Powder point; Project propellant; Puddle; Pump; Pure; Q'd; Quartz; Quick; Quill; Rachet jaw; Rails; Rank; Red; Red devils; Red phosphorus; Redneck cocaine; Redneck heroin; Richie Rich; Rip; Rippers; Rock; Rock crank; Rocket fuel; Rocky mountain high; Rosebud; Rudy; Rudy's; Rumdumb; Running Pizo; Sack; Sam's sniff; Sarahs; Satan dust; Scante; Scap; Schlep rock; Schmiz; Sciznac; Scooby snax; Scootie; Scud; Scwadge; Sean; Sha-bang; Shab; Shabs; Shabu; Shamers; Shards; Shit; Shiznac; Shiznack; Shiznastica; Shiznit; Shiznittlebang; Shiznitty; Shizzo; Shnizzie snort; Shwack; Skeech; Sketch; Ski; Skitz; Sky rocks; Sliggers; Smiley smile; Smurf dope; Smzl; Snaps; Sniff; Snow; Soap; Soap dope; Space food; Spaceman; Spackle; Spagack; Sparacked; Sparked; Sparkle; Speckled birds; Speed; Speed racer; Spin, spin, spin; Spinack; Spindarella; Spinney Boo; Spinning; Spishak; Splash; Spook; Spoosh; Sprack; Spriz-zlefracked; Sprung; Spun Ducky Woo; Squawk; Stallar; Sto-Pid; Stove top; Styels; Sugar; Suger; Super ice; Sweetness; Swerve; Syabu; Ta'doww; Talkie; Tanner; Tasmanian Devil; T.D.; Teena; Tenner; Terry; Texas Tea; The New Prozac; The White House; Tic; Tical; Tick tick; Tik; Tina; Tink Dust; Tish; Tobats; Tootie; Tots; Torqued; Trash; Trippin Trip; Tubbytoast; Tuk; Tuk-tuk; Tutu; Twack; Twacked out; Tweak; Tweedle Doo; Tweek; Tweezwasabi; Twiz; Twizacked; Ugly Dust; Upside-down b; Uppers; Vanilla Pheromones; Wake; Wash; Water; Way; We We We; Wet; Whacked; White; White bitch; White Cross; White Crosses; White Crunch; White ink; White junk; White lady; White pony; Whiz; Who-Ha; Wigg; Work; Working man's cocaine; Xaing; YAMA; Ya Ba; Yaaba; Yaba; Yanmer Bammer; Yank; Yankee; Yay; Yead Out; Yellow bam; Yellow bam; Yellow powder; Zingin; Zip; Zoiks; Zoom.

### **Pharmacopoeias.** In *Jpn* and *US*.

**USP 31** (Methamphetamine Hydrochloride). White, odourless or practically odourless, crystals or crystalline powder. Freely soluble in water, in alcohol, and in chloroform; very slightly soluble in ether. Its solutions in water have a pH of about 6. Store in airtight containers. Protect from light.

# Adverse Effects, Treatment, and Precautions

As for Dexamfetamine Sulfate, p.2153.

Metamfetamine is subject to extensive abuse.

**Abuse.** Pulmonary oedema, <sup>1,2</sup> cardiomyopathy, <sup>2,3</sup> and chore-oathetosis and rhabdomyolysis<sup>4</sup> have occurred after smoking of metamfetamine crystals. It is also abused orally and intravenously, and has been associated with fatalities. <sup>5</sup> Dental problems such as rampant caries and tooth wear and fracture, colloquially termed "meth mouth", have been reported with long-term abuse. <sup>6,7</sup> A marked increase in prevalence of abuse in recent years, particularly in the USA, has led to increased research into the consequences of such abuse and methods for management. <sup>3-11</sup>

A study of former users suggests that metamfetamine abuse may cause long-term neuronal damage.  $^{\rm 12}$ 

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- Hong R, et al. Cardiomyopathy associated with the smoking of crystal methamphetamine. JAMA 1991; 265: 1152–4.

- 3. Yeo K-K, et al. The association of methamphetamine use and cardiomyopathy in young patients. Am J Med 2007; 120: 165–71.
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- Lineberry TW, Bostwick JM. Methamphetamine abuse: a perfect storm of complications. Mayo Clin Proc 2006; 81: 77–84.
- Ernst T, et al. Evidence for long-term neurotoxicity associated with methamphetamine abuse: a H MRS study. Neurology 2000; 54: 1344–9.

**Porphyria.** Metamfetamine has been associated with acute attacks of porphyria and is considered unsafe in porphyric patients.

#### Interactions

As for Dexamfetamine Sulfate, p.2153.

#### **Pharmacokinetics**

Like most amfetamines (see Dexamfetamine Sulfate, p.2154) metamfetamine is readily absorbed from the gastrointestinal tract and is distributed into most body tissues. It is partially metabolised in the liver and excreted in the urine.

### ◊ References.

- Shappell SA, et al. Chronopharmacokinetics and chronopharmacodynamics of dextromethamphetamine in man. J Clin Pharmacol 1996; 36: 1051–63.
- Harris DS, et al. The bioavailability of intranasal and smoked methamphetamine. Clin Pharmacol Ther 2003; 74: 475–86.

#### **Uses and Administration**

Metamfetamine hydrochloride is a central stimulant and indirect-acting sympathomimetic with actions and uses similar to those of dexamfetamine (p.2154).

It has been given orally in the treatment of attention deficit hyperactivity disorder in children aged 6 years and over, although dexamfetamine and methylphenidate are the main stimulants used (p.2148). Initial doses are 5 mg once or twice daily, increased if necessary by 5 mg at weekly intervals to the optimum effective dose, usually 20 to 25 mg daily given in 2 divided doses.

Metamfetamine hydrochloride has also been used as an anorectic in the management of obesity (p.2149), although amfetamines are no longer recommended for this indication. A dose of 5 mg before each meal has been given orally. Treatment should be for no longer than a few weeks.

Metamfetamine hydrochloride has also been used parenterally as a pressor agent

The laevorotatory form, levmetamfetamine (p.1564) is used as a nasal decongestant.

## Preparations

USP 31: Methamphetamine Hydrochloride Tablets.

Proprietary Preparations (details are given in Part 3) Chile: Cidrin; Escancil†; USA: Desoxyn.

# Methcathinone $\otimes$

Ephedrone; Methylcathinone; Monomethylpropion. 2-(Methylamino)-I-phenyl-I-propan-I-one.

 $C_{10}H_{13}NO = 163.2.$ CAS — 5650-44-2.

NOTE. The following terms have been used as 'street names' (see p.vi) or slang names for various forms of methcathinone: Bathub speed; Cadillac express; Cat; Catt; Cosmos; Crank; Gagers; Gaggers; Go fast; Go-fast; Goob; Jee cocktail; Jeff; Khat; Mulk; Mulka; Qat; Slick superspeed; Sniff; Somali; Somali tea; Speed; Star; Stat; The C; Tweak; Tweek; Tweeker; Wild cat; Wonder star.

### Profile

Methcathinone, a methyl derivative of cathinone (p.2152), produces CNS stimulant effects similar to those of the amfetamines (see Dexamfetamine, p.2153) and is subject to abuse.

### ♦ References.

1. Belhadj-Tahar H, Sadeg N. Methcathinone: a new postindustrial drug. Forensic Sci Int 2005; 153: 99–101.