SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE MEDICINAL PRODUCT

Nytol Liquid Caramel Flavour 10mg/5ml oral solution

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 5ml contains:
Diphenhydramine Hydrochloride 10mg

Excipients with known effects:
Sucrose
Propylene Glycol
Methyl, ethyl and propyl hydroxybenzoates

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Oral Solution
Caramel coloured solution

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

As a sleep aid: As a short term mild hypnotic

4.2 Posology and method of administration

As a sleep aid:

Adults: 10 to 25ml at bedtime, or after retiring when sleep is not readily achieved.

Paediatric Population:
Adolescents and children: Not recommended for adolescents and children under the age of 16.

Elderly: As for adults

Do not use continuously for more than 2 weeks without consulting a doctor.

Method of administration

Oral

Do not exceed the stated dose or frequency of dosing

4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

Contraindicated for use in patients with the following conditions:

- stenosing peptic ulcer
- pyloroduodenal obstruction
- known acquired or congenital QT interval prolongation
- known risk factors for QT interval prolongation including a known cardiovascular disease, significant electrolytes imbalance (hypokalaemia, hypomagnesaemia), family history of sudden cardiac death, significant bradycardia, concomitant use with drugs known to prolong the QT interval and/or induce Torsade de Pointes (see section 4.5).

Sedation of children under the age of 16 should only be under medical direction, consequently use as a sedative in this age group is contraindicated.

4.4 Special warnings and precautions for use

Diphenhydramine should be used with caution in patients with myasthenia gravis, epilepsy or seizure disorders, prostatic hypertrophy, urinary retention, narrow-angle glaucoma, asthma, bronchitis and chronic obstructive pulmonary disease (COPD). Patients with moderate to severe hepatic impairment and moderate to severe renal impairment should consult their doctor before using this medicine.

Tolerance may develop with continuous use. The patient should not take the product for more than two weeks without consulting a doctor, and seek medical advice if sleeplessness persists, as insomnia may be a symptom of a serious underlying medical illness.

Cases of abuse and dependence were reported with diphenhydramine in adolescents or young adults for recreational use and/or in patients with psychiatric disorders and/or history of abuse disorders. The onset of signs or symptoms raising abuse should be monitored.

May increase the effects of alcohol, therefore alcohol should be avoided. Avoid use of other antihistamine-containing preparations, including topical antihistamines and cough and cold medicines.

Antihistamines may suppress the cutaneous histamine response to allergen extracts and should be stopped several days before skin testing.

This product should not be used to sedate a child due to the possibility of respiratory depression, lethargy, sleep apnoea and cardiorespiratory arrest.

Use with caution in the elderly, who are more likely to experience side-effects. Avoid use in elderly patients with confusion.

Diphenhydramine may aggravate symptoms of restless leg syndrome (see section 4.8).

This medicinal product contains sucrose:
Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine. Contains 1.66g of sucrose in 5ml. This should be taken into account in patients with diabetes mellitus

This medicinal product contains parahydroxybenzoates (methyl E218, ethyl E214, propyl E216 & butyl):
May cause allergic reactions (possibly delayed).

This medicinal product contains 260 mg propylene glycol in each 5ml.

This medicinal product contains less than 1 mmol sodium (23 mg) per 5 ml, that is to say essentially 'sodium-free'.

4.5 Interaction with other medicinal products and other forms of interaction

Diphenhydramine may potentiate the sedative effects of alcohol and other CNS depressants (e.g. tranquillizers, hypnotics and anxiolytics).

Monoamine oxidase inhibitors (MAOIs) prolong and intensify the anticholinergic effects of diphenhydramine. The product should be used with caution with MAOIs or within 2 weeks of stopping an MAOI.

As diphenhydramine has some antimuscarinic activity, the effects of some anticholinergic drugs (e.g. atropine, tricyclic antidepressants) may be potentiated therefore medical advice should be sought before taking diphenhydramine with such medicines.

Diphenhydramine is an inhibitor of the cytochrome p450 isoenzyme CYP2D6. Therefore, there may be a potential for interaction with drugs which are primarily metabolised by CYP2D6, such as metoprolol and venlafaxine.

The concomitant administration of medicines that prolong the QT interval of the ECG (such as Class Ia and Class III anti-arrhythmics) should be avoided.

Diphenhydramine should not be used in patients receiving any of the above drugs unless directed by a doctor.

4.6 Fertility, pregnancy and lactation

Pregnancy

Diphenhydramine crosses the placenta. Because animal reproduction studies are not always predictive of human response and since there is inadequate experience with use of diphenhydramine in pregnant women, the potential risk for humans is unknown. Use of diphenhydramine during the first trimester of pregnancy has been associated with an increased risk of foetal abnormalities. Use of sedating antihistamines during the third trimester may result in reactions in the newborn or premature neonates. This drug is not recommended during pregnancy. Consult a doctor before use.

Breast-feeding
Diphenhydramine has been detected in breast milk, but the effect of this on breastfed infants is unknown. Diphenhydramine is not recommended for use during lactation. Consult a doctor before use.

Fertility
There are no available data on the effect of diphenhydramine on fertility.

4.7 Effects on ability to drive and use machines

Diphenhydramine is a hypnotic and will produce drowsiness or sedation soon after the dose has been taken. It may also cause dizziness, blurred vision, cognitive and psychomotor impairment. These can seriously affect the patient's ability to drive and use machines. If affected, do not drive or operate machinery.

4.8 Undesirable effects

Specific estimation of the frequency of adverse events for OTC products is inherently difficult (particularly numerator data). Adverse reactions which have been observed in clinical trials and which are considered to be common (occurring in >1/100 to <1/10) or very common (occurring in >1/10) are listed below by MedDRA System Organ Class. The frequency of other adverse reactions identified during postmarketing use is unknown, but these reactions are likely to be uncommon (occurring in >1/1,000 to <1/100) or rare (occurring in <1/1000).

System Organ Class	Very Common (≥1/10)	Common ≥1/100, < 1/10	Uncommon ≥1/1,000, <1/100	Rare ≥1/10,000, <1/1000	Very Rare <1/10,000	Not known (cannot be estimated from available data)
Cardiac Disorders						tachycardia, palpitations, arrhythmias
Eye Disorders						blurred vision
General disorders and administration site conditions:		fatigue				
Gastrointestinal Disorders		dry mouth				gastrointestinal disturbance including nausea, vomiting
Immune System Disorders						hypersensitivity reactions including rash, urticaria, dyspnoea and angioedema

System Organ Class	Very Common (≥1/10)	Common ≥1/100, < 1/10	Uncommon ≥1/1,000, <1/100	Rare ≥1/10,000, <1/1000	Very Rare <1/10,000	Not known (cannot be estimated from available data)
Musculoskeletal and connective tissue Disorders						muscle twitching
Nervous System Disorders		sedation, drowsiness, disturbance in attention, unsteadiness, dizziness				convulsions, headache, paraesthesia, dyskinesias, hypoesthesia, restless leg syndrome
Psychiatric Disorders						confusion, paradoxical excitation (e.g. increased energy, restlessness, nervousness), depression, sleep disturbances * The elderly are more prone to confusion and paradoxical excitation.
Renal and urinary disorders						urinary difficulty, urinary retention
Respiratory, thoracic and mediastinal disorders						thickening of bronchial secretions

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme, website: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

4.9 Overdose

Symptoms and signs

Overdose is likely to result in effects similar to those listed under adverse reactions. Additional symptoms may include mydriasis, fever, flushing, agitation, tremor, dystonic reactions, hallucinations and ECG changes. Large overdose may cause rhabdomyolysis, convulsions, delirium, toxic psychosis, arrhythmias, coma and cardiovascular collapse.

Management

Treatment should be supportive and directed towards specific symptoms. Convulsions and marked CNS stimulation should be treated with parenteral diazepam.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antihistamines for systemic use – aminoalkyl ethers – diphenhydramine, ATC Code: R06AA02.
Diphenhydramine is an ethanolamine-derivative anti-histamine with anti-cholinergic (anti-spasmodic), anti-tussive and sedative activity. It acts by inhibiting the effects on H1-receptors.

Diphenhydramine is effective in reducing sleep onset (i.e, time to fall asleep) and increasing the depth and quality of sleep.

5.2 Pharmacokinetic properties

Diphenhydramine is a histamine H1 receptor antagonist.

Absorption
Diphenhydramine hydrochloride is rapidly absorbed following oral administration. Apparently it undergoes first-pass metabolism in the liver and only about 40-60% of an oral dose reaches systematic circulation as unchanged diphenhydramine.

Distribution
Diphenhydramine is rapidly distributed throughout the whole body. Peak plasma concentrations are attained within 1-4 hours. The sedative effect also appears to be maximal within 1-3 hours after administration of a single dose. It is positively correlated with the plasma drug concentration.

Biotransformation
Diphenhydramine is approx 80-85% bound to plasma proteins. Diphenhydramine is rapidly and almost completely metabolised in the liver. It is metabolised principally to diphenylmetoxyacetic acid and is also dealkylated. The metabolites are conjugated with glycine and glutamine and excreted in urine.

Elimination
The elimination half-life ranges from 2.4-9.3 hours in healthy adults. The terminal elimination half-life is prolonged in liver cirrhosis. Only about 1% of a single dose is excreted unchanged in urine.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sucrose

Sodium saccharin

Glycerin

Parahydroxybenzoates (methyl E218, ethyl E214, propyl E216 & butyl)

Propylene glycol

Caramel flavouring

Caramel E150

Purified water

6.2 Incompatibilities

Incompatible with barbiturates and iodo compounds in solution.

6.3 Shelf life

36 months.

6.4 Special precautions for storage

Store below 25°C.

6.5 Nature and contents of container

Amber Type III glass bottles of 100ml, 150ml or 300ml.

Cap - white HDPE, HOPP & LDPE child resistant, tamper evident closure with either an EPE wad or an EPE faced with aluminium foil / PET film, backed with PET film wad.

A 30ml measuring cup may also be provided.

6.6 Special precautions for disposal

None stated.

7 MARKETING AUTHORISATION HOLDER

Omega Pharma Ltd
Wrafton, Braunton,
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8 MARKETING AUTHORISATION NUMBER(S)

PL 02855/0313

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

20/03/2025

10 DATE OF REVISION OF THE TEXT

20/05/2025