

## SUMMARY OF PRODUCT CHARACTERISTICS

### 1 NAME OF THE MEDICINAL PRODUCT

Bupeaze 35 micrograms/h Transdermal Patches

### 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each transdermal patch contains 20 mg buprenorphine.

Area containing the active substance: 25 cm<sup>2</sup>

Nominal release rate: 35 micrograms of buprenorphine per hour (over a period of 96 hours).

For the full list of excipients, see section 6.1.

### 3 PHARMACEUTICAL FORM

Transdermal patch

Rectangular beige coloured patch with rounded edges and imprinted with “Buprenorphin” and “35 µg/h” in blue colour.

### 4 CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

Moderate to severe cancer pain and severe pain which does not respond to non-opioid analgesics.

Bupeaze is not suitable for the treatment of acute pain.

#### 4.2 Posology and method of administration

##### Posology

##### *Patients over 18 years of age*

The lowest possible dosage providing adequate pain relief should be given. Three transdermal patch strengths are available to provide such adaptive treatment: Bupeaze 35 micrograms/h, Bupeaze 52.5 micrograms/h and Bupeaze 70 micrograms/h.

*Initial dose selection:* patients who have previously not received any analgesics should start with the lowest transdermal patch strength (Bupeaze 35 micrograms/h). Patients previously given a WHO step-I analgesic (non-opioid) or a step-II analgesic (weak opioid) should also begin with Bupeaze 35 micrograms/h. According to the WHO recommendations, the administration of a non-opioid analgesic can be continued, depending on the patient's overall medical condition.

When switching from a step-III analgesic (strong opioid) to Bupeaze and choosing

the initial transdermal patch strength, the nature of the previous medication, administration and the mean daily dose should be taken into account in order to avoid the recurrence of pain. In general it is advisable to titrate the dose individually, starting with the lowest transdermal patch strength (Bupeaze 35 micrograms/h). Clinical experience has shown that patients who were previously treated with higher daily dosages of a strong opioid (in the dimension of approximately 120 mg oral morphine) may start the therapy with the next higher transdermal patch strength (see also section 5.1).

To allow for individual dose adaptation in an adequate time period sufficient supplementary immediate release analgesics should be made available during dose titration.

The necessary strength of Bupeaze must be adapted to the requirements of the individual patient and checked at regular intervals.

After application of the first Bupeaze transdermal patch the buprenorphine serum concentrations rise slowly both in patients who have been treated previously with analgesics and in those who have not. Therefore initially, there is unlikely to be a rapid onset of effect. Consequently, a first evaluation of the analgesic effect should only be made after 24 hours.

The previous analgesic medication (with the exception of transdermal opioids) should be given in the same dose during the first 12 hours after switching to Bupeaze and appropriate rescue medication on demand in the following 12 hours.

#### *Dose titration and maintenance therapy*

Bupeaze should be replaced after 96 hours (4 days) at the latest. For convenience of use, the transdermal patch can be changed twice a week at regular intervals, e.g. always on Monday morning and Thursday evening. The dose should be titrated individually until analgesic efficacy is attained. If analgesia is insufficient at the end of the initial application period, the dose may be increased, either by applying more than one transdermal patch of the same strength or by switching to the next transdermal patch strength. At the same time no more than two transdermal patches regardless of the strength should be applied.

Before application of the next Bupeaze strength the amount of total opioids administered in addition to the previous transdermal patch should be taken into consideration, i.e. the total amount of opioids required, and the dosage adjusted accordingly. Patients requiring a supplementary analgesic (e.g. for breakthrough pain) during maintenance therapy may take for example one to two 0.2 mg buprenorphine sublingual tablets every 24 hours in addition to the transdermal patch. If the regular addition of 0.4 – 0.6 mg sublingual buprenorphine is necessary, the next strength should be used.

#### *Paediatric population*

As buprenorphine has not been studied in patients under 18 years of age, the use of the medicinal product in patients below this age is not recommended.

#### *Elderly patients*

No dosage adjustment of Bupeaze is required for elderly patients.

#### *Patients with renal insufficiency*

Since the pharmacokinetics of buprenorphine is not altered during the course of renal failure, its use in patients with renal insufficiency, including dialysis patients, is possible.

#### *Patients with hepatic insufficiency*

Buprenorphine is metabolised in the liver. The intensity and duration of its action may be affected in patients with impaired liver function. Therefore patients with liver insufficiency should be carefully monitored during treatment with Bupeaze.

#### Method of administration

##### Treatment goals and discontinuation

Before initiating treatment with Bupeaze, a treatment strategy including treatment duration and treatment goals, and a plan for end of the treatment, should be agreed together with the patient, in accordance with pain management guidelines. During treatment, there should be frequent contact between the physician and the patient to evaluate the need for continued treatment, consider discontinuation and to adjust dosages if needed. When a patient no longer requires therapy with Bupeaze, it may be advisable to taper the dose gradually to prevent symptoms of withdrawal. In absence of adequate pain control, the possibility of hyperalgesia, tolerance and progression of underlying disease should be considered (see section 4.4).

Bupeaze should be applied to non-irritated, clean skin on a non-hairy flat surface, but not to any parts of the skin with large scars. Preferable sites on the upper body are: upper back or below the collar-bone on the chest. Any remaining hairs should be cut off with a pair of scissors (not shaved). If the site of application requires cleansing, this should be done with water. Soap or any other cleansing agents should not be used. Skin preparations that might affect adhesion of the transdermal patch to the area selected for application of Bupeaze should be avoided.

The skin must be completely dry before application. Bupeaze is to be applied immediately after removal from the sachet. Following removal of the release liner, the transdermal patch should be pressed firmly in place with the palm of the hand for approximately 30 seconds. The transdermal patch will not be affected when bathing, showering or swimming. However, it should not be exposed to excessive heat (e.g. sauna, infrared-radiation).

Bupeaze should be worn continuously for up to 4 days. After removal of the previous transdermal patch a new Bupeaze transdermal patch should be applied to a different skin site. At least one week should elapse before a new transdermal patch is applied to the same area of skin.

#### Duration of administration

Bupeaze should not be used longer than necessary. If long-term pain treatment with Bupeaze is necessary in view of the nature and severity of the illness, then careful and regular monitoring should be carried out (if necessary with breaks in treatment) to establish whether and to what extent further treatment is necessary.

#### Discontinuation of Bupeaze

After removal of Bupeaze buprenorphine serum concentrations decrease gradually and thus the analgesic effect is maintained for a certain amount of time. This should be considered when therapy with Bupeaze is to be followed by other opioids. As a general rule, a subsequent opioid should not be administered within 24 hours after removal of Bupeaze. For the time being only limited information is available on the starting dose of other opioids administered after discontinuation of Bupeaze

### **4.3 Contraindications**

- hypersensitivity to the active substance or to any of the excipients listed in section 6.1
- opioid-dependent patients and for narcotic withdrawal treatment
- conditions in which the respiratory centre and function are severely impaired or may become so
- patients who are receiving MAO inhibitors or have taken them within the last two weeks (see section 4.5)
- patients suffering from myasthenia gravis
- patients suffering from delirium tremens.
- pregnancy (see section 4.6)

#### **4.4 Special warnings and precautions for use**

Buprenorphine must only be used with particular caution in acute alcohol intoxication, convulsive disorders, in patients with head injury, shock, a reduced level of consciousness of uncertain origin, increased intracranial pressure without the possibility of ventilation.

Buprenorphine occasionally causes respiratory depression. Therefore care should be taken when treating patients with impaired respiratory function or patients receiving medicinal products which can cause respiratory depression.

Buprenorphine has a substantially lower dependence liability than pure opioid agonists. In healthy volunteer and patient studies with buprenorphine, withdrawal reactions have not been observed. However, after long-term use of buprenorphine withdrawal symptoms, similar to those occurring during opiate withdrawal, cannot be entirely excluded (see section 4.8). These symptoms are: agitation, anxiety, nervousness, insomnia, hyperkinesia, tremor and gastrointestinal disorders.

In patients abusing opioids, substitution with buprenorphine may prevent withdrawal symptoms. This has resulted in some abuse of buprenorphine and caution should be exercised when prescribing it to patients suspected of having drug abuse problems.

Buprenorphine may lower the seizure threshold in patients with a history of seizure disorder.

##### *Post-operative opioid use (PPOU) and opioid-induced ventilatory impairment (OIVI)*

Do not use for acute post-operative pain owing to the increased risk of persistent post-operative opioid use (PPOU) and opioid-induced ventilatory impairment (OIVI).

##### Tolerance and opioid use disorder (abuse and dependence)

Tolerance, physical and psychological dependence, and opioid use disorder (OUD) may develop upon repeated administration of opioids such as Bupeaze. Repeated use of Bupeaze can lead to OUD. A higher dose and longer duration of opioid treatment can increase the risk of developing OUD. Abuse or intentional misuse of Bupeaze may result in overdose and/or death. The risk of developing OUD is increased in patients with a personal or a family history (parents or siblings) of substance use disorders (including alcohol use disorder), in current tobacco users or in patients with

a personal history of other mental health disorders (e.g. major depression, anxiety and personality disorders).

Before initiating treatment with Bupeaze and during the treatment, treatment goals and a discontinuation plan should be agreed with the patient (see section 4.2). Before and during treatment the patient should also be informed about the risks and signs of OUD. If these signs occur, patients should be advised to contact their physician. Patients will require monitoring for signs of drug-seeking behavior (e.g. too early requests for refills). This includes the review of concomitant opioids and psycho-active drugs (like benzodiazepines). For patients with signs and symptoms of OUD, consultation with an addiction specialist should be considered.

#### *Risk from concomitant use of sedating medicinal product such as benzodiazepines or related substances*

Concomitant use of Bupeaze and sedating medicinal products such as benzodiazepines or related substances may result in sedation, respiratory depression, coma and death. Because of these risks, concomitant prescribing with these sedating medicines should be reserved for patients for whom alternative treatment options are not possible. If a decision is made to prescribe Bupeaze concomitantly with sedating medicinal product, the lowest effective dose should be used, and the duration of the concomitant treatment should be as short as possible.

The patients should be followed closely for signs and symptoms of respiratory depression and sedation. In this respect, it is strongly recommended to inform patients and their caregivers to be aware of these symptoms (see section 4.5).

Buprenorphine is metabolised in the liver. The intensity and duration of effect may be altered in patients with liver function disorders. Therefore such patients should be carefully monitored during buprenorphine treatment.

Athletes should be aware that this medicine may cause a positive reaction to sports doping control tests.

#### *Serotonin syndrome*

Concomitant administration of Bupeaze and other serotonergic agents, such as selective serotonin re-uptake inhibitors (SSRIs), serotonin norepinephrine re-uptake inhibitors (SNRIs) or tricyclic antidepressants may result in serotonin syndrome, a potentially life-threatening condition (see section 4.5).

If concomitant treatment with other serotonergic agents is clinically warranted, careful observation of the patient is advised, particularly during treatment initiation and dose increases.

Symptoms of serotonin syndrome may include mental-status changes, autonomic instability, neuromuscular abnormalities, and/or gastrointestinal symptoms.

If serotonin syndrome is suspected, a dose reduction or discontinuation of therapy should be considered depending on the severity of the symptoms.

#### *Sleep-related breathing disorders*

Opioids can cause sleep-related breathing disorders including central sleep apnoea (CSA) and sleep-related hypoxemia. Opioid use increases the risk of CSA in a dose-dependent fashion. In patients who present with CSA, consider decreasing the total opioid dosage.

#### *Paediatric population*

As buprenorphine has not been studied in patients under 18 years of age, the use of the medicinal product in patients below this age is not recommended.

#### *Patients with fever / external heat*

Fever and the presence of heat may increase the permeability of the skin. Theoretically in such situations buprenorphine serum concentrations may be raised during buprenorphine treatment. Therefore on treatment with buprenorphine, attention should be paid to the increased possibility of opioid reactions in febrile patients or those with increased skin temperature due to other causes.

### **4.5 Interaction with other medicinal products and other forms of interaction**

Bupeaze should be used cautiously when co-administered with:

- Serotonergic medicinal products, selective serotonin re-uptake inhibitors (SSRIs), serotonin norepinephrine re-uptake inhibitors (SNRIs) or tricyclic antidepressants as the risk of serotonin syndrome, a potentially life-threatening condition, is increased (see section 4.4).

On administration of MAO inhibitors in the last 14 days prior to the administration of the opioid pethidine life-threatening interactions have been observed affecting the central nervous system and respiratory and cardiovascular function. The same interactions between MAO inhibitors and buprenorphine cannot be ruled out (see section 4.3).

Sedating medicinal product such as benzodiazepines or related substance  
The concomitant use of opioids with sedating medicinal product such as benzodiazepines or related substance increases the risk of sedation, respiratory depression, coma and death because of additive CNS depressant effect. The dose and duration of the concomitant use should be limited (see section 4.4).

When buprenorphine is applied together with other opioids, anaesthetics, hypnotics, sedatives, antidepressants, neuroleptics, and in general, medicinal products that depress respiration and the central nervous system, the CNS effects may be intensified. This applies also to alcohol.

The concomitant use of buprenorphine with gabapentinoids (gabapentin and pregabalin) may result in respiratory depression, hypotension, profound sedation, coma or death (see section 4.4).

Concomitant administration of buprenorphine with anticholinergics or medications with anticholinergic activity (e.g. tricyclic antidepressants, antihistamines, antipsychotics, muscle relaxants, anti-Parkinson drugs) may result in increased anticholinergic adverse effects.

Administered together with inhibitors or inducers of CYP 3A4 the efficacy of buprenorphine may be intensified (inhibitors) or weakened (inducers).

### **4.6 Fertility, pregnancy and lactation**

#### Pregnancy

There are no adequate data from the use of buprenorphine in pregnant women. Studies in animals have shown reproductive toxicity (see section 5.3). The potential risk for humans is unknown.

Towards the end of pregnancy high doses of buprenorphine may induce respiratory depression in the neonate even after a short period of administration. Long-term administration of buprenorphine during the last three months of pregnancy may cause a withdrawal syndrome in the neonate.

Therefore Bupeaze is contraindicated during pregnancy.

#### Breast-feeding

Buprenorphine is excreted in human milk. In rats buprenorphine has been found to inhibit lactation.

Bupeaze should not be used during lactation.

#### Fertility

The effect of buprenorphine on human fertility is unknown. Buprenorphine did not affect fertility in animal studies (see section 5.3).

### **4.7 Effects on ability to drive and use machines**

Buprenorphine has major influence on the ability to drive and use machines. Even when used according to instructions, buprenorphine may affect the patient's reactions to such an extent that road safety and the ability to operate machinery may be impaired.

This applies particularly at the beginning of treatment, at any change of dosage and when buprenorphine is used in conjunction with other centrally acting substances including alcohol, tranquillisers, sedatives and hypnotics.

Patients who are affected (e.g. feeling dizzy or drowsy or experience blurred or double vision) should not drive or use machines while using buprenorphine and for at least 24 hours after the patch has been removed.

Patients stabilized on a specific dosage will not necessarily be restricted if the above mentioned symptoms are not present.

#### *Additional information for UK only*

This medicine can impair cognitive function and can affect a patient's ability to drive safely. This class of medicine is in the list of drugs included in the regulations under 5a of the Road Traffic Act 1988. When prescribing this medicine, patients should be told:

- The medicine is likely to affect your ability to drive
- Do not drive until you know how the medicine affects you
- It is an offence to drive while you have this medicine in your body over a specified limit unless you have a defence (called the 'statutory defence').
- This defence applies when:
  - The medicine has been prescribed to treat a medical or dental problem; and
  - You have taken it according to the instructions given by the prescriber and in the information provided with the medicine.
- Please note that it is still an offence to drive if you are unfit because of the medicine (i.e. your ability to drive is being affected).

Details regarding a new driving offence concerning driving after drugs have been taken in the UK may be found here:

#### **4.8 Undesirable effects**

The following adverse reactions were reported after administration of buprenorphine in clinical studies and from postmarketing surveillance.

The frequencies are given as follows:

Very common ( $\geq 1/10$ )

Common ( $\geq 1/100$  to  $1/10$ )

Uncommon ( $\geq 1/1,000$  to  $< 1/100$ )

Rare ( $\geq 1/10,000$  to  $< 1/1,000$ )

Very rare ( $\leq 1/10,000$ )

Not known (cannot be estimated from the available data)

- a) The most commonly reported systemic adverse reactions were nausea and vomiting. The most commonly reported local adverse reactions were erythema and pruritus.
- b)

##### **Immune system disorders**

Very rare      serious allergic reactions\*

##### **Metabolism and nutrition disorders**

Rare      appetite lost

##### **Psychiatric disorders**

Uncommon      confusion, sleep disorder, restlessness

Rare      psychotomimetic effects (e.g. hallucinations, anxiety,      nightmares),  
decreased libido

Very rare      dependence, mood swings

##### **Nervous system disorders**

Common      dizziness, headache

Uncommon      sedation, somnolence

Rare      concentration impaired, speech disorder, numbness,      dysequilibrium,  
paraesthesia (e.g. pricking or burning skin      sensation)

Very rare      muscle fasciculation, paraesthesia

Not known      Seizures

##### **Eye disorders**

Rare visual disturbance, blurring of vision, eyelid oedema

Very rare miosis

### **Ear and labyrinth disorders**

Very rare ear pain

### **Cardiac/Vascular disorders**

Uncommon circulatory disorders (such as hypotension or, rarely, even circulatory collapse)

Rare hot flushes

### **Respiratory, thoracic and mediastinal disorders**

Common dyspnoea

Rare respiratory depression

Very rare hyperventilation, hiccups

### **Gastrointestinal disorders**

Very common nausea

Common vomiting, constipation

Uncommon dry mouth

Rare pyrosis

Very rare retching

### **Skin and subcutaneous tissue disorders**

Very common erythema, pruritus

Common exanthema, diaphoresis

Uncommon rash

Rare urticaria

Very rare pustules, vesicles

Not known dermatitis contact, application skin discolouration

### **Renal and urinary disorders**

Uncommon urinary retention, micturition disorders

### **Reproductive system and breast disorders**

Rare decreased erection

### **General disorders and administration site conditions**

Common	oedema, tiredness
Uncommon	weariness
Rare	withdrawal symptoms*, administration site reactions
Very rare	thoracic pain

\* see section c)

- c) In some cases delayed allergic reactions occurred with marked signs of inflammation. In such cases treatment with buprenorphine should be terminated.

#### Drug dependence

Repeated use of Bupeaze can lead to drug dependence, even at therapeutic doses. The risk of drug dependence may vary depending on a patient's individual risk factors, dosage, and duration of opioid treatment (see section 4.4).

Buprenorphine has a low risk of dependence. After discontinuation of buprenorphine, withdrawal symptoms are unlikely. This is due to the very slow dissociation of buprenorphine from the opiate receptors and to the gradual decrease of buprenorphine serum concentrations (usually over a period of 30 hours after removal of the last transdermal patch). However, after long-term use of buprenorphine withdrawal symptoms, similar to those occurring during opiate withdrawal, cannot be entirely excluded.

These symptoms include: agitation, anxiety, nervousness, insomnia, hyperkinesia, tremor and gastro-intestinal disorders.

#### 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](http://www.mhra.gov.uk/yellowcard) or search for MHRA Yellow Card in the Google Play or Apple App Store.

## **4.9 Overdose**

Buprenorphine has a wide safety margin. Due to the rate-controlled delivery of small amounts of buprenorphine into the blood circulation high or toxic buprenorphine concentrations in the blood are unlikely. The maximum serum concentration of buprenorphine after the application of the buprenorphine 70 micrograms/h transdermal patch is about six times less than after the intravenous administration of the therapeutic dose of 0.3 mg buprenorphine.

Symptoms

In principal, on overdose with buprenorphine, symptoms similar to those of other centrally acting analgesics (opioids) are to be expected. These are: respiratory depression, sedation, somnolence, nausea, vomiting, cardiovascular collapse, and marked miosis.

#### Treatment

General emergency measures apply. Keep the airway open (aspiration!), maintain respiration and circulation depending on the symptoms. Naloxone has a limited impact on the respiratory depressant effect of buprenorphine. High doses are needed given either as repeated boluses or infusion (for example starting with a bolus administration of 1-2 mg intravenously. Having attained an adequate antagonistic effect, administration by infusion is recommended to maintain constant naloxone plasma levels). Therefore, adequate ventilation should be established.

## 5 PHARMACOLOGICAL PROPERTIES

### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Opioids, Oripavine derivatives

ATC code: N02AE01

Buprenorphine is a strong opioid with agonistic activity at the mu-opioid receptor and antagonistic activity at the kappa-opioid receptor. Buprenorphine appears to have the general characteristics of morphine, but has its own specific pharmacology and clinical attributes.

In addition, numerous factors, e.g. indication and clinical setting, route of administration and the interindividual variability, have an impact on analgesia and therefore have to be considered when comparing analgesics.

In daily clinical practice different opioids are ranked by a relative potency, although this is to be considered a simplification.

The relative potency of buprenorphine in different application forms and in different clinical settings has been described in literature as follows:

- Morphine p.o.: BUP i.m. as 1 : 67 - 150 (single dose; acute pain model)
- Morphine p.o.: BUP s.l. as 1 : 60 - 100 (single dose, acute pain model; multiple dose , chronic pain, cancer pain)
- Morphine p.o.: BUP TTS as 1 : 75 - 115 (multiple dose, chronic pain)

Abbreviations:

p.o = oral; i.m. = intramuscular; s.l. = sublingual; TTS = transdermal; BUP = buprenorphine

Adverse reactions are similar to those of other strong opioid analgesics.

Buprenorphine appears to have a lower dependence liability than morphine.

### 5.2 Pharmacokinetic properties

#### a) General characteristics of the active substance

Buprenorphine has a plasma protein binding of about 96%.

Buprenorphine is metabolised in the liver to N-dealkylbuprenorphine (norbuprenorphine) and to glucuronide conjugated metabolites. 2/3 of the active substance is eliminated unchanged in the faeces and 1/3 eliminated as conjugates of unchanged or dealkylated buprenorphine via the urinary system. There is evidence of enterohepatic recirculation.

Studies in non-pregnant and pregnant rats have shown that buprenorphine passes the blood-brain and placental barriers. Concentrations in the brain (which contained only unchanged buprenorphine) after parenteral administration were 2-3 times higher than after oral administration. After intramuscular or oral administration buprenorphine apparently accumulates in the foetal gastrointestinal lumen – presumably due to biliary excretion, as enterohepatic circulation has not fully developed.

#### **b) Characteristics of buprenorphine in healthy volunteers**

After the application of buprenorphine, buprenorphine is absorbed through the skin. The continuous delivery of buprenorphine into the systemic circulation is by controlled release from the adhesive polymer-based matrix system.

After the initial application of buprenorphine the plasma concentrations of buprenorphine gradually increase, and after 12-24 h the plasma concentrations reach the minimum effective concentration of 100 pg/ml. From the studies performed with the buprenorphine 35 micrograms/h in healthy volunteers, an average  $C_{max}$  of 200 to 300 pg/ml and an average  $t_{max}$  of 60-80 h were determined. In one volunteer study, buprenorphine 35 micrograms/h and buprenorphine 70 micrograms/h were applied in a cross-over design. From this study, dose proportionality for the different strengths was demonstrated.

After removal of buprenorphine the plasma concentrations of buprenorphine steadily decrease and are eliminated with a half-life of approx. 30 hours (range 22 - 36). Due to the continuous absorption of buprenorphine from the depot in the skin elimination is slower than after intravenous administration.

### **5.3 Preclinical safety data**

Standard toxicological studies have not shown evidence of any particular potential risks for humans. In tests with repeated doses of buprenorphine in rats the increase in body weight was reduced.

Studies on fertility and general reproductive capacity of rats showed no detrimental effects. Studies in rats and rabbits revealed signs of fetotoxicity and increased postimplantation loss, although only at maternal toxic doses.

Studies in rats showed diminished intra-uterine growth, delays in the development of certain neurological functions and high peri/post natal mortality in the neonates after treatment of the dams during gestation or lactation. There is evidence that complicated delivery and reduced lactation contributed to these effects. There was no evidence of embryotoxicity including teratogenicity in rats or rabbits.

*In vitro* and *in vivo* examinations on the mutagenic potential of buprenorphine did not indicate any clinically relevant effects.

In long-term studies in rats and mice there was no evidence of any carcinogenic potential relevant for humans.

Toxicological data available did not indicate a sensitising potential of the additives of the transdermal patches.

## **6 PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

*Adhesive matrix (containing buprenorphine):* povidone K90, levulinic acid, oleyl oleate, poly[acrylic acid-co-butylacrylate-co-(2-ethylhexyl)acrylate-co-vinylacetate] (5:15:75:5)

*Adhesive matrix (without buprenorphine):* poly[(2-ethylhexyl)acrylate-co-glycidylmethacrylate-co-(2-hydroxyethyl)acrylate-co-vinylacetate] (68:0,15:5:27)

*Separating foil between adhesive matrices with and without buprenorphine:* polyethylene terephthalate film

*Backing foil:* polyester

*Release liner (on the front covering the adhesive matrix containing buprenorphine):* polyethylene terephthalate film, siliconised

blue printing ink

### **6.2 Incompatibilities**

Not applicable

### **6.3 Shelf life**

3 years

### **6.4 Special precautions for storage**

Do not store above 30°C.

### **6.5 Nature and contents of container**

Each child-proof sachet is made of a composite layer material consisting of Paper/ PET/ PE/ Aluminium/ Surlyn. One sachet contains one transdermal patch.

*Pack sizes:*

Packs containing 3, 4, 5, 6, 8, 10, 12, 16, 18, 20 or 24 individually sealed transdermal patches.

Not all pack sizes may be marketed.

## **6.6 Special precautions for disposal**

Used transdermal patches should be folded in half, with the adhesive side inwards, placed in the original sachet and discarded safely, or whenever possible returned to the pharmacy. Any used or unused transdermal patches should be disposed of in accordance with local requirements or returned to the pharmacy.

## **7 MARKETING AUTHORISATION HOLDER**

Dr. Reddy's Laboratories (UK) Ltd.  
410 Cambridge Science Park  
Milton Road  
Cambridge  
CB4 0PE  
United Kingdom

## **8 MARKETING AUTHORISATION NUMBER(S)**

PL 08553/0544

## **9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

30/11/2020

## **10 DATE OF REVISION OF THE TEXT**

22/05/2026