

## DATA SHEET

### 1 TILADE CFC-FREE 2 MG AEROSOL INHALER, METERED DOSE

Tilade CFC-free 2 mg aerosol inhaler, metered dose.

### 2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Nedocromil sodium 1.4085% w/w.

Each canister provides at least 112 actuations each containing 2 mg of nedocromil sodium ex-valve and 1.9 mg ex-standard actuator.

For the full list of excipients, see section 6.1.

### 3 PHARMACEUTICAL FORM

Tilade CFC-free is presented as a metered dose inhaler containing nedocromil sodium as a suspension in the new, non - CFC propellant HFA-227.

### 4 CLINICAL PARTICULARS

#### 4.1 THERAPEUTIC INDICATIONS

Tilade CFC-free is indicated in the treatment of bronchial asthma (whether extrinsic or intrinsic in nature, and including asthmatic bronchitis, late onset asthma, exercise induced asthma, and bronchospasm provoked by a variety of stimuli such as cold air, inhaled allergens, atmospheric pollutants and other irritants). Tilade CFC-free is intended for regular prophylactic treatment and not for symptomatic relief.

In the management of asthma, Tilade CFC-free improves pulmonary function, reduces the frequency and severity of attacks and reduces bronchospasm, cough and bronchial hyper-responsiveness.

In patients already receiving treatment for their asthma, Tilade CFC-free can be given in addition to all existing therapies and will in many cases provide added therapeutic benefit. Having established this benefit of Tilade CFC-free, it may be possible to gradually reduce or eliminate concomitant therapy.

## 4.2 DOSE AND METHOD OF ADMINISTRATION

### Dose

#### ***Adults, including the elderly and children over 2 years of age:***

The recommended dosage is two actuations 2 to 4 times a day; the dosage to be adjusted within this range according to the needs of the patient. The usual maintenance dosage is 2 inhalations twice daily, but in more severe cases or to gain initial control of symptoms, two inhalations 4 times daily may be needed.

Tilade CFC-free, in a single (4mg) dose of 2 inhalations a few minutes before exposure, affords protection for several hours against bronchospasm provoked by exercise, cold air, inhaled allergens, atmospheric pollutants and other irritants.

A total dose of 8 actuations per day should not be exceeded.

#### ***Paediatric population***

Tilade CFC-Free is not recommended for use in children 2 years of age and younger.

### Method of administration

If the inhaler is new, it should be primed by actuating 4 times prior to inhalation. If not used for more than 3 days, additional priming with 2 actuations is advised.

The inhaler should be well shaken, the dust cap removed and after each actuation the aerosol inhaled slowly and deeply. To avoid condensation of moisture in the inhaler and blocking of the spray, exhalation through the inhaler should be avoided. The dust-cap should be replaced following use.

## 4.3 CONTRAINDICATIONS

Tilade CFC-free is contraindicated in patients with known hypersensitivity to any of its constituents.

## 4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Tilade CFC-free should not be used for the relief of an acute attack of bronchospasm.

## 4.5 INTERACTION WITH OTHER MEDICINES AND OTHER FORMS OF INTERACTION

Nedocromil sodium has been used in association with numerous other drugs in man, including oral and inhaled beta-adrenergic agonists, inhaled and oral corticosteroids, theophylline and other

methylxanthines and ipratropium bromide. No interactions have been observed in humans and animals.

#### **4.6 FERTILITY, PREGNANCY AND LACTATION**

##### **Pregnancy**

Category B1:

Studies with nedocromil sodium in pregnant or lactating animals have failed to reveal a hazard. However, as with all medicines, caution should be exercised, especially during the first trimester of pregnancy.

##### **Breast-feeding**

On the basis of animal studies and its physicochemical properties, it is considered that only negligible amounts of nedocromil sodium may pass into human breast milk. There is no information to suggest that the use of nedocromil sodium by nursing mothers has any undesirable effects on the baby.

##### **Fertility**

No data available.

#### **4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES**

Tilade CFC-free has no known effect on ability to drive or operate machinery.

#### **4.8 UNDESIRABLE EFFECTS**

Few side effects have been reported, principally headache and upper gastrointestinal tract symptoms (nausea, vomiting, dyspepsia, and abdominal pain). These are usually mild and transient. In common with other inhaled medications Tilade CFC-free may produce cough or bronchospasm. Unusual or unpleasant taste may occur.

##### **Reporting of suspected adverse reactions**

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions <https://nzphvc.otago.ac.nz/reporting/>.

## 4.9 OVERDOSE

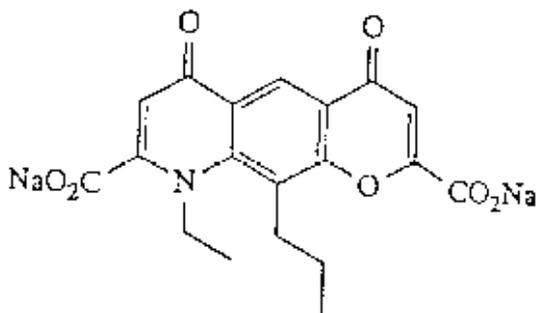
Animal studies have not shown evidence of toxic effects of nedocromil sodium even at high dosage, nor have extended human studies revealed any safety hazard with the drug. Overdosage is therefore unlikely to cause problems. However, if suspected, treatment should be supportive and directed to the control of the relevant symptoms.

For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764766).

## 5 PHARMACOLOGICAL PROPERTIES

### 5.1 PHARMACODYNAMIC PROPERTIES

Pharmacotherapeutic group: Antiallergic agents, excl. corticosteroids, ATC code: R03BC03



CAS number: 69049-74-7<sup>4</sup>

Nedocromil sodium (Disodium 9-ethyl-6,9-dihydro-4,6-dioxo-10-propyl-4H-pyrano-(3,2-g)quinoline-2,8-dicarboxylate).

Nedocromil sodium is a novel pyranoquinoline derivative that inhibits the activity of a range of inflammatory cells known to be involved in asthma. Thus nedocromil sodium inhibits the release of inflammatory mediators and the chemotactic response of eosinophils and neutrophils. Cytokines are a series of protein molecules with a diverse range of potent inflammatory effects on the airways and their release from cells such as human alveolar macrophages, bronchial epithelial cells and mast cells is markedly suppressed by nedocromil sodium. The compound also prevents the release of preformed mediators such as histamine and rapidly synthesised eicosanoids from mast cells. Activation of sensory nerves in isolated bronchial muscle results in bronchoconstriction and this response is inhibited by nedocromil sodium.

In animal models, nedocromil sodium inhibits antigen induced bronchospasm airway oedema formation, the late reaction, bronchial hyperreactivity and citric acid induced cough. In addition it inhibits bronchial hyperreactivity induced by non-specific agents such as cigarette smoke and sulphur dioxide. The late asthmatic reaction and bronchial hyperreactivity can also be suppressed when the compound is administered after the early reaction.

In asthmatic patients nedocromil sodium inhibits antigen-induced immediate and late reactions and reduces bronchial hyperreactivity. The drug is also capable of inhibiting the late reaction when administered after the early reaction. Bronchospasm induced by non-specific factors such as exercise, fog, cold air, adenosine and sulphur dioxide is prevented by nedocromil sodium. The release of histamine into the bronchial lumen following challenge with antigen or hyperosmolar saline is significantly reduced by treatment with nedocromil sodium. The anti-inflammatory effects of the drug in asthmatic patients are demonstrated by its ability to inhibit antigen induced influx of eosinophils in lavage fluid and to reduce the numbers of activated eosinophils in the bronchial submucosa after 16 weeks treatment.

## 5.2 PHARMACOKINETIC PROPERTIES

### Absorption

After inhalation of nedocromil sodium (in common with other drugs inhaled using an MDI) a small fraction reaches the lungs, while a major portion of the dose is deposited in the mouth or oropharynx and swallowed. The oral absorption of nedocromil sodium from the gastrointestinal tract is low, being approximately 2% of an orally administered dose. Hence, nedocromil sodium measured in plasma following inhalation is considered to represent mainly the drug absorbed by the airways. After inhalation, plasma concentrations of nedocromil sodium reach a maximum within one hour post-dosing and decline with a half-life of 1-2 hours.

### Distribution/Biotransformation

Nedocromil sodium is moderately (up to 89%) and reversibly bound to human plasma proteins, and is not metabolised in man or animals.

### Elimination

In man nedocromil sodium is excreted unchanged in the urine (approximately 70%) and in faeces (approximately 30%).

## 5.3 PRECLINICAL SAFETY DATA

Animal studies have failed to reveal toxic effects with nedocromil sodium even at high doses.

## 6 PHARMACEUTICAL PARTICULARS

### 6.1 LIST OF EXCIPIENTS

Apaflurane

Macrogol 600

Menthol

Povidone

## **6.2 INCOMPATIBILITIES**

None known.

## **6.3 SHELF LIFE**

24 months.

## **6.4 SPECIAL PRECAUTIONS FOR STORAGE**

Store below 30°C, not in a refrigerator.

As the aerosol inhaler canister is pressurised it should be protected from heat or direct sunlight and should not be punctured or incinerated even when empty.

## **6.5 NATURE AND CONTENTS OF CONTAINER AND SPECIAL EQUIPMENT FOR USE, ADMINISTRATION OR IMPLANTATION**

A metered dose pressurised aerosol. The 19 ml aluminium canister is fitted with a 100 microlitres metering valve, which delivers 112 actuations (each containing 2 mg nedocromil sodium per shot from the valve, or 1.9 mg from the standard actuator), after initial priming.

Each metered dose inhaler unit consists of an aerosol canister and a plastic mouthpiece, with a dustcap.

The metered dose inhaler unit is supplied as a single pack in a carton together with a patient information leaflet.

An additional mouthpiece has been supplied to assist in the cleaning and maintenance of Tilade CFC-free.

## **6.6 SPECIAL PRECAUTIONS FOR DISPOSAL**

No special requirements for disposal. Do not incinerate.

# **7 MEDICINE SCHEDULE**

Prescription Medicine

## 8 SPONSOR

sanofi-aventis new zealand limited  
Level 8,  
56 Cawley Street, Ellerslie,  
Auckland, New Zealand  
Free Call: 0800 283 684

## 9 DATE OF FIRST APPROVAL

25 March 1999

## 10 DATE OF REVISION OF THE TEXT

21 September 2018

### Summary of changes

Section changed	Summary of new information
All	Align with the Medsafe data sheet format including minor additions of text to meet requirements