# Fylod® Tablets/Syrup

(Doxofylline)

## COMPOSITION

**Fylod®** 400mg Tablets
Each tablet contains:
Doxofylline MS……..400mg

**Fylod®** 100mg/5ml Syrup
Each 5ml contains:
Doxofylline MS…….....100mg

## DRUG DESCRIPTION

**Fylod®** contains doxofylline (7-(1, 3-dioxolan-2-ylmethyl) theophylline) is a methyl xanthine derivative characterized by the presence of dioxolane group in position 7. It has potent bronchodilator activity equal or superior to theophylline.

## CLINICAL PHARMACOLOGY

PHARMACODYNAMICS:

Pharmacotherapeutic group: Xanthines, other systemic drugs for obstructive airway diseases.

ATC code: R03DA11

Mechanism of action: Doxofylline is a novel bronchodilator xanthine that differs from theophylline for the presence of a dioxolane group in position 7. Like theophylline, its mechanism of action is related to the inhibition of phosphodiesterase activities. However, differently from theophylline, doxofylline appears to have decreased affinities toward adenosine A1 and A2 receptors which may account for the better safety profile of the drug.

It has the ability to overcome bronchoconstriction, inflammatory events (pleurisy) and thromboxane A2 release when challenged with platelet activating factor.

PHARMACOKINETICS:

Absorption: After oral administration, peak plasma levels were reached after one hour. T max 1.19+ 0.19 hours; Bioavailability: 62.6%; After repeated administrations doxofylline reaches the steady-state in about 4 days; Distribution: Single dose pharmacokinetic studies in man after oral and intravenous administration defined distribution and absorption of the drug; Protein binding: ~48% at pH 7.4; Metabolism: Extensive metabolism in liver (90% of the total drug clearance. Hydroxyethyltheophylline is the only detectable circulating metabolite of doxofylline; Excretion: <4% excreted unchanged in the urine; Half-life elimination: >6 hours allowing thrice daily dose regimen, 8-10 hours during long term treatment allowing twice daily dose regimen; No accumulation of the drug was noted after one week of treatment.

## INDICATIONS AND DOSAGE

INDICATIONS AND USAGE:

For the treatment of COPD, bronchial asthma and pulmonary disease with spastic bronchial component.

DOSAGE AND ADMINISTRATION:

Method of Administration:

Oral; administration data with regard to food is not available.

Dosage:

*Adults:*

- Tablets: 400mg tablet, two or three times daily.
- Syrup: 20ml (4 teaspoonsful), given two or three times daily (20ml corresponds to 400mg of doxofylline).

At the recommended posology, the plasma levels of doxofylline do not generally exceed 20 •g/ml, so it is not essential to check these levels periodically. If the dosage is increased, the blood levels of the drug must be measured (the therapeutic value is about 10 •g/ml, the value bordering on toxicity is 20 •g/ml).

SPECIAL POPULATIONS:

Paediatric population: It should be administered cautiously to young children.

- Children below 12 years: 6-9 mg/kg bodyweight, given two times daily.
- Children above 12 years: 10ml (2 teaspoonsful), given two or three times daily.

Geriatric population: It should be administered cautiously to elderly patients.

- Tablet: 200 mg tablet (1/2 tablet), two or three times daily.
- Syrup: 10ml (2 teaspoonsful), given two or three times daily.

Renal impairment: Dose may need to decrease in patients with renal impairment due to reduce drug clearance; dosage adjustment data is not available.

Hepatic impairment: Dose may need to decrease in patients with hepatic impairment due to reduce drug clearance; dosage adjustment data is not available.

OVERDOSAGE:

If a potential oral overdose is established, the patient may present with severe arrhythmias and seizure; these symptoms could be the first sign of intoxication. As there is no specific antidote, in case of overdose a symptomatic treatment of cardiovascular collapse should be instituted. It includes withdrawal of drug. If seizures have not occurred following acute overdosage, the stomach should be emptied immediately by inducing emesis or by gastric lavage, followed by administration of activated charcoal and cathartic. In case of seizures, airway should first be established and maintained, and seizures may be treated with IV diazepam, phenobarbital or combination. There is no sufficient evidence to support the use of dialysis in the event of overdosage.

## CONTRAINDICATIONS

- This product is contraindicated in individuals who have shown hypersensitivity to its components or other xanthine derivatives.
- It is also contraindicated in patients with acute myocardial infarction, hypotension and in lactating women.

## WARNINGS AND PRECAUTIONS

CONCERNS RELATED TO DISEASE:

The half-life of xanthine derivatives is influenced by a number of known variables.

Liver disease: It may be prolonged in patients with liver disease requiring dose adjustments.

Congestive heart failure: Patients with congestive heart failure needs dose adjustment due to increase half-life of the drug. Patients with congestive heart failure have markedly prolonged drug serum levels following discontinuation of the drug.

Respiratory diseases: In patients with chronic obstructive lung disease or Influenza immunization or concomitant respiratory infections, due to decrease in half-life, clearance may be increased.

Other diseases: Caution should be observed in administering the product to patients with cardiovascular disease (arrhythmias, angina pectoris, acute myocardial infarction, hypertension, chronic cor pulmonale) hypoxemia, hyperthyroidism, peptic ulcer and in those with renal impairment.

CONCURRENT DRUG THERAPY ISSUES:

Drug-drug interactions: Potentially significant interactions may exist, requiring dose or frequency adjustment & additional monitoring. Refer to Drug Interactions section for more detailed information.

## SPECIAL POPULATIONS:

**Pregnancy:** Animal reproduction studies indicate that doxofylline does not cause fetal harm when administered to pregnant animals nor can affect reproduction capacity. However, since there is limited experience in humans during pregnancy, xanthines should be given to a pregnant woman only if clearly needed.
**Lactation:** Methylxanthines are distributed into all body compartments. They cross the placenta and are distributed into breast milk. Doxofylline is contraindicated in nursing mothers.
**Geriatrics:** It should be administered cautiously to elderly patients particularly those with conditions such as cardiac failure, pulmonary edema, or hepatic dysfunction. Dosage may be reduced and careful monitoring of drug levels may be required to avoid toxicity.

**EFFECTS ON ABILITY TO DRIVE AND USE MACHINES:**
The product does not affect the patient's alertness and therefore does not interfere with his/her ability to drive and use machines.

## ADVERSE REACTIONS

After xanthine administration, nausea, vomiting, epigastric pain, cephalalgia, irritability, insomnia, tachycardia, extrasystole, tachypnea, and occasionally hyperglycemia and albuminuria, may occur. If a potential oral overdose is established, the patient may present with severe arrhythmias and seizure; these symptoms could be the first sign of intoxication. Adverse reactions may cause the withdrawal from treatment; a lower dose rechallenge may start only after the advice of physician.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY:**
No data available.

**REPORTING OF SUSPECTED ADVERSE REACTIONS:**
Reporting suspected adverse reactions after authorization of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals and patients/carers are asked to report any suspected adverse reactions at safety@samikhi.com or call on +92 (0) 21 34383400 (Office hours and out of office hours). Also, adverse event may be reported via website: www.samipharmapk.com

## DRUG INTERACTIONS

Doxofylline should not be administered together with other xanthine derivatives, including beverages and foods containing caffeine. Toxic synergism with ephedrine or other sympathomimetic drugs has been documented for xanthines. In case of factors that may influence the clearance of xanthine derivatives, monitoring of the concentration of the blood levels of the drug is recommended for the control of the therapeutic range.

**INTERACTION REQUIRING DOSE INCREASE:**
Phenytoin, other anticonvulsants and cigarette smoking may increase the clearance of xanthine derivatives with a reduction of plasmatic half-life. In these cases, it may prove necessary to increase the dosage of the drug.

**INTERACTION REQUIRING DOSE DECREASE:**
Concomitant therapy with erythromycin, troleandomycin, lincomycin, clindamycin, allopurinol, cimetidine, propranolol and anti-flu vaccine may decrease the hepatic clearance of xanthines causing an increase in blood level. In these cases, it may prove necessary to reduce the dosage of the drug.

## STABILITY

See expiry on the pack.

## AVAILABILITY

***Fylod***® 400mg tablets in a pack of 10's
***Fylod***® 100mg/5ml syrup in a pack of 60ml

## INSTRUCTIONS

Dosage as advised by registered medical practitioner.
To be sold on the prescription of registered medical practitioner only.
Keep out of the reach of children.
Avoid exposure to heat, light, humidity and freezing.
Store between 15 to 30°C.
Improper storage may deteriorate the medicine.

**For Tablets:** Store in the original package in order to protect from moisture.
**For Syrup:** Medicine should not be used if container is leaking or it contains undissolved particle(s)

Please read the contents carefully before use.
This package insert is regularly reviewed and updated.

# فائیلوڈ® ٹیبلٹ/سیرپ

## (ڈوکسوفائلین)

خوراک: ڈاکٹر کی ہدایت کے مطابق استعمال کریں۔
بچوں کی پہنچ سے دور رکھیں۔
دوا کو دھوپ، گرمی، نمی اور منجمد ہونے سے محفوظ ۱۵ سے ۳۰ ڈگری سینٹی گریڈ کے درمیان میں رکھیں
ورنہ دوا خراب ہو جائیگی۔
برائے ٹیبلٹ: دوا کو نمی سے محفوظ رکھنے کے لیے اسکی اصل پیکنگ میں رکھیں۔
برائے سیرپ: دوا کے ایک ہونے یا اس میں کوئی غیر حل پزیر شے نظر آنے کی صورت میں ہرگز استعمال نہ کریں۔

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