

# DOXONIL

## Doxofylline

### Composition:

**Doxonil 400 Tablet:** Each film coated tablet contains Doxophylline INN 400 mg.

**Doxonil Syrup:** Each 5 ml syrup contains Doxophylline INN 100 mg.

**Pharmacology:** Doxonil (Doxophylline) is a novel bronchodilator. It structurally differs from Theophylline due to the presence of a dioxolane group in position 7. Doxophylline selectively inhibits phosphodiesterase-4 thereby relaxes bronchial smooth muscle. However, differently from Theophylline, Doxophylline appears to have decreased affinities toward adenosine A<sub>1</sub> and A<sub>2</sub> receptors, which may account for the better safety profile of the drug. Doxophylline is reported to inhibit platelet activating factor (PAF) and generation of leukotriene production.

**Indication:** Doxonil (Doxophylline) is used to treat asthma, COPD and bronchospasm.

### Dosage and Administration:

**Adults:** 400 mg tablet two or three times daily or as prescribed by the physician.

**Elderly:** 200 mg tablet two or three times daily.

Maximum daily dose: 1200 mg

### Children:

**>12 years of age:** 10 ml syrup or 200 mg tablet two or three times daily.

**Below 12 years:** 6-9 mg/kg body weight two times daily.

Doxofylline can be taken with or without food.

Adults: 1 tablet daily in the evening. On the basis of clinical response the dose may be increased to 1 tablet twice daily.

Children (above 6 years of age): 6 mg/kg body weight twice daily, i.e. if bodyweight is 10 kg, 3ml (60 mg) twice daily.

**Contraindication:** Doxophylline is contraindicated in acute myocardial infarction. It is also contraindicated in patients with hypotension, in lactating women & patients who have shown hypersensitivity to its components.

**Warning & Precaution:** The half-life of xanthine derivatives is influenced by a number of known variables. It may be prolonged in patients with liver disease, in patients with congestive heart failure and in those patients taking certain other drugs like erythromycin, troleandomycin, lincomycin, allopurinol, cimetidine, propranolol and anti-flu vaccine. In these cases, a lower dose of Doxophylline may be needed. Phenytoin, other anticonvulsants and smoking may cause an increase in clearance with a shorter mean half-life. In these cases higher doses of Doxophylline may be needed.

**Side Effects:** Doxophylline rarely causes serious side effects, however possible side effects are similar for taking excess amount of caffeine. These include: nausea, vomiting, headache, upset stomach and heartburn.

**Use in Pregnancy and Lactation:** Animal reproduction studies indicate that, Doxophylline does not cause fetal harm when administered to pregnant animals or can not affect reproduction capacity. However, since there is limited experience in human during pregnancy, xanthines should be given to pregnant women only if clearly needed. Doxophylline is contraindicated in nursing mothers.

**Drug Interaction:** Doxophylline should not be administered together with other xanthine derivatives. Toxic synergism with ephedrine has been documented for xanthines. Like other xanthines, concomitant therapy with troleandomycin, lincomycin, clindamycin, allopurinol, cimetidine, ranitidine, propranolol and anti-flu vaccine may decrease the hepatic clearance of xanthines causing an increase in blood levels. No evidence of a relationship between Doxophylline serum concentrations and toxic events have been reported.

**Over Dose:** Common clinical manifestation of xanthin overdose include nausea, vomiting, gastrointestinal bleeding, metabolic acidosis, hypokalemia, hypotension, cardiac arrhythmias and seizure often ending in death.

**Storage:** Store in a dry & cool place (below 30°C), protected from light and moisture. Keep out of reach of children.

**Packing:** Doxonil 400 Tablet: Each box contains 30's tablets in Alu-Alu blister pack.

**Doxonil Syrup:** Each bottle contains 100 ml syrup.

Manufactured by:



**MEDICON Pharmaceuticals Ltd.**  
Mirpur, Dhaka, Bangladesh