

# Instruction for use



**COMPOSITION:**

Each ampoule of PROVEDYE® 0.5% contains 10 mg of **Methylene Blue (Proveblue®)** diluted in 2 ml of water for injection.

**INDICATIONS:**

**Marker for surgical visualisation such as intra operative seal tests, leakage visualisation and delineation of the fistula tract.**

**METHOD OF ADMINISTRATION AND DOSAGE:**

The 0.5% Methylene Blue sterile solution can be administered:

- Directly in local injection,
- In local injection diluted in normal saline solution,
- In oral administration diluted in water.

PROVEDYE® must be used immediately after opening or dilution.

The PROVEDYE® dilution and volume to be administered depend on the destination of the coloration. PROVEDYE® could be diluted until 0.01%. For this, dilute 2 parts of PROVEDYE® 0.5% with 100 parts of normal saline solution or water.

*Details on recommendations on method of administration according to the use are presented in section SPECIAL PRECAUTIONS FOR USE*

**CONTRAINDICATIONS:**

Do not administer PROVEDYE®:

- in case of known hypersensitivity to the methylene blue or to any other thiazine dyes,
- in case of previous or ongoing treatment with Selective Serotonin Reuptake Inhibitors (SSRIs), bupropion, buspirone, clomipramine, mirtazapine and venlafaxine,
- in case of Glucose-6-Phosphate Dehydrogenase deficiency,
- in case of pregnancy or breastfeeding PROVEDYE® should be avoided.

In case of moderate or severe renal disease patients must be closely monitored.



**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)



**Methylene Blue 0,5%**

**PROVEDYE® 0.5% 2 ml - Sterile solution.**

Preparation for local or oral administration. Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly.

PROVEDYE® may be diluted in water (for oral use only) or in normal saline solution and must be used immediately after opening or dilution. PROVEDYE® could be diluted until 0.01%. For this, dilute 2 parts of PROVEDYE® 0.5% with 100 parts of normal saline solution or water. Any unused product or waste material should be disposed of in accordance with local requirements.

PROVEDYE®	USE	METHOD OF ADMINISTRATION	
ALL SURGICAL DEPARTMENTS	<b>Bladder leaks visualisation</b>	Local injection via a urinary catheter (Foley)	200 – 300 ml of diluted ProveDye® solution
	<b>Cysts delineation</b>	Local injection directly into the cyst	0.1 to 0.5 ml of undiluted ProveDye® solution
URO-GYNECOLOGICAL AND BREAST SURGERY	<b>Intra-operative delineation of vagino/utero-vesical or colorecto-vesical fistula tract</b>	Local injection	200 – 300 ml of diluted ProveDye® solution
	<b>Ureter leaks and anastomosis visualisation</b> during colorectal or vascular surgery	Local retrograde injection via a urinary catheter	Diluted ProveDye® solution
	<b>Visualisation during transaxillar endoscopy</b> in breast surgery	Local injection directly into the infra-mammary fold	1 ml of undiluted ProveDye® solution
	<b>Nipple discharge visualisation</b>	Local injection directly into the breast duct	2 ml of undiluted ProveDye® solution



**WARNINGS AND PRECAUTIONS:**

- > PROVEDYE® must be used by a healthcare professional.
- > A preoperative assessment is recommended before using PROVEDYE®
- > Protective measures against patient exposure to strong light, including that within instruments such as pulse oximeters should be taken, because there is a risk of cutaneous photosensitivity reaction.
- > The wearing of gloves is recommended for users.
- > Do not use a damaged ampoule of PROVEDYE®. Do not use PROVEDYE® if the solution is colourless.
- > PROVEDYE® must be used immediately after opening or dilution.
- > Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly.
- > PROVEDYE® is for single use only: discard any remaining solution after opening.
- > In case of re-use of PROVEDYE®, there is a risk to loss sterility due to potential contamination of the sterile solution (it is considered as a decrease of technical performance).
- > PROVEDYE® should be disposed of in clinical waste.

**ADVERSE EFFECTS:**

- > Gastrointestinal: nausea, vomiting, diarrhea, abdominal pain, blue colour of faeces and saliva.
- > Hematologic: hemolysis (in glucose-6-phosphate dehydrogenase deficiency, or high doses), methemoglobinemia (after high doses), hyperbilirubinemia.
- > Cardiovascular: hypertension, hypotension, arrhythmia, chest pain.
- > Body as a whole: profuse sweating.
- > Dermal: rash (blue macules, severe burning pain), skin discoloration, urticaria, increased sensitivity of the skin to the light (photosensitivity).
- > Nervous system: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation; serotonin syndrome when certain medicines to treat depression or anxiety have been taken.
- > Administration site: thrombophlebitis, (resulting from high doses, if not adequately diluted – not more than 350 mg of methylene blue should be diluted in each 500 mL of infusion fluid), necrosis (if extravasation occurs).
- > Renal: blue colour of urine.
- > Respiratory, thoracic and mediastinal: dyspnea, tachypnea, hypoxia.
- > Ophthalmic: mydriasis.
- > Immune: anaphylactic reaction.
- > Oral administration may cause gastrointestinal disturbances and dysuria.
- > Use of methylene blue for endoscopic tattoo has been associated with vascular necrosis, mucosal ulceration, mural necrosis, extramural fat necrosis and inflammatory changes in the colon.

**STORAGE:**

Do not refrigerate PROVEDYE® under 8°C. Do not freeze.  
Keep the ampoule in the original package to protect it from light.

**CONDITIONING:**

2 ml ampoules, in packs of 5 or 20 ampoules.

**PUBLICATION DATE :**

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**Provepharm** \*  
Life Solutions

**ProveDye**®

**Methylene Blue 0,5%**

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

**PROVEDYE® 0.5% 2 ml - Sterile solution.**

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PROVEDYE®	USE	METHOD OF ADMINISTRATION	
<b>GASTRO-DIGESTIVE SURGERY</b>	<b>Colon &amp; bile leakage visualisation</b>	Local injection via a catheter	1 to 20 ml of diluted ProveDye® solution
	<b>Gastric &amp; pancreatic leakage visualisation</b>	Oral administration or via nasogastric tube	Diluted ProveDye® solution
	<b>Intra-operative delineation of anal fistula tract</b>	Local injection directly in the external opening	Undiluted ProveDye® solution
<b>ENT-ENDOCRINE SURGERY</b>	<b>Parathyroid glands identification</b>	Local administration	1 ml of undiluted ProveDye® solution
	<b>Temporalis fascia graft visualisation</b>	Local injection directly into the graft	2 ml of undiluted ProveDye® solution
	<b>Tracheo-oesophageal leakage visualisation</b>	Oral administration or via endotracheal tube or oesophageal catheter	Diluted ProveDye® solution
	<b>Intra-operative delineation of trachea-oesophageal fistula tract</b>		

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