Methylene Blue 0,5%

#### COMPOSITION:

Each ampoule of PROVEDYE® 0.5% sterile solution 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, delineation of fistula tract and visualisation of Sentinel Lymph Nodes (SLN) in oncologic surgery.

#### **CONTRAINDICATIONS:**

Do not administer PROVEDYE®:

- > In case of known hypersensitivity to methylene blue or to any other thiazine dyes,
- In case of recent (end of treatment less than one month ago) or ongoing treatment with Selective Serotonin Reuptake Inhibitors (SSRIs), Serotonin and Norepinephrine Reuptake Inhibitors (SNRIs), Monoamine Oxidase Inhibitors (MAOI), bupropion, buspirone, clomipramine, mirtazapine and venlafaxine,
- In case of Glucose-6-Phosphate Dehydrogenase deficiency,

In case of pregnancy or breastfeeding, PROVEDYE® should be avoided.

# METHOD OF ADMINISTRATION AND DOSAGE:

PROVEDYE® can be administered:

- > Through local injection, undiluted or diluted in isotonic saline solution,
- Through oral administration, diluted in water.

For visualisation of Sentinel Lymph Nodes (SLN) in oncologic surgery, PROVEDYE® must be diluted in isotonic saline solution, prior being administered through local injection.

 $\label{eq:proved} \mbox{PROVEDYE}^{\mbox{\tiny{\$}}}\mbox{ must be used immediately after opening or dilution}.$ 

PROVEDYE® dilution and volume to be administered depend on the destination of the coloration. PROVEDYE® could be diluted until 0.01%. For example: for a 0.01% dilution, dilute 2 parts of PROVEDYE® 0.5% with 100 parts of isotonic saline solution or water; for a 1.25 mg/mL dilution in isotonic saline solution, dilute 1 part of PROVEDYE® 0.5% with 3 parts of isotonic saline solution.

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















## SPECIAL PRECAUTIONS FOR USE

Methylene Blue 0,5%

(Document to keep in the operative theatre)

## PROVEDYE® 0.5% sterile solution

Preparation for local or oral administration. Do not inject PROVEDYE $^{\circ}$  intravenously, intrathecally, intra-amniotically or intraocularly.

PROVEDYE® may be diluted in water (for oral use only), or in isotonic saline solution.

PROVEDYE® must be used immediately after opening or dilution.

PROVEDYE® can be diluted until 0.01%. For example: for a 0.01% dilution, dilute 2 parts of PROVEDYE® 0.5% with 100 parts of isotonic saline solution or water; for a 1.25 mg/mL dilution in isotonic saline solution, dilute 1 part of PROVEDYE® 0.5% with 3 parts of isotonic saline solution. Any unused product or waste material should be disposed of in accordance with local requirements.

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PROVEDYE®	USE	METHOD OF ADMINISTRATION (Proposed route of administration and dilution)  Peritumoral or subareolar 2 mL (or less) of 1.25 mg/mL		
BREAST	Visualisation of sentinel lymph			
SURGERY	nodes in breast cancer	injection	solution of PROVEDYE® diluted in	
			isotonic saline solution	
	Visualisation during transaxillar	Local injection directly into	1 mL of undiluted PROVEDYE®	
	endoscopy in breast surgery	the infra-mammary fold	solution	
	Nipple discharge visualisation	Local injection directly into the breast duct	2 mL of undiluted PROVEDYE® solution	
URO- GYNECOLO- GICAL SURGERY	Visualisation of sentinel lymph nodes in endometrial or cervical cancer	Uterine Cervix injection	1 mL of 2.5 mg/mL solution of PROVEDYE® diluted in isotonic saline solution	
	Intra-operative delineation of vagino/utero-vesical or colorecto- vesical fistula tract	Local injection	200 – 300 mL of diluted PROVEDYE® solution in isotonic saline solution	
	Ureter leaks and anastomosis visualisation during colorectal or vascular surgery	Local retrograde injection via a urinary catheter	Diluted PROVEDYE® solution in isotonic saline solution	
OTHER SURGERY	Pilonidal sinus visualisation	Local injection into the pilonidal sinus	2 to 4 mL of solution of PROVEDYE® undiluted or diluted in isotonic saline solution	
	Cysts delineation	Local injection directly into the cyst	0.1 to 0.5 mL of undiluted PROVEDYE® solution	
	Bladder leaks visualisation	Local injection via a urinary catheter (Foley)	200 – 300 mL of diluted PROVEDYE® solution in isotonic saline solution	
	Visualisation of sentinel lymph nodes in melanoma	Peritumoral, intradermal injection	Less than 1 mL of 1.25 mg/mL or 2.5 mg/mL solution of PROVEDYE® in isotonic saline solution	

#### WARNINGS AND PRECAUTIONS:

- PROVEDYE® must be administered 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 PROVEDYE® 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, 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.
- In case of moderate or severe renal disease patients must be closely monitored.

### **ADVERSE EFFECTS:**

- Gastrointestinal: nausea, vomiting, diarrhea, abdominal pain, blue colour of faeces and saliva.
- Hematologic: haemolysis (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).
- Central Nervous System: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation; serotonin syndrome when certain medicines to treat depression or anxiety have been
- Administration site: thrombophlebitis, necrosis (resulting from high doses, if not adequately diluted).
- Renal: blue colour of urine.
- Respiratory, thoracic and mediastinal: dyspnea, tachypnea, hypoxia.
- Ophtalmic: 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.

#### Note to the user

Any serious incident that has occurred in relation to the device should be reported to the manufacturer at safety@provepharm.com and the competent authority of the Member State in which the user is established.

#### SHELF-LIFE

48 months

### 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:**

IFU version 17 - Last revision: 06/2023.



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Provepharm S.A.S.

# SPECIAL PRECAUTIONS FOR USE

Methylene Blue 0,5%

(Document to keep in the operative theatre)

## PROVEDYE® 0.5% sterile solution

Preparation for local or oral administration. Do not inject PROVEDYE® intravenously, intrathecally, intraamniotically or intraocularly.

PROVEDYE® may be diluted in water (for oral use only), or in isotonic saline solution.

PROVEDYE® must be used immediately after opening or dilution.

PROVEDYE® can be diluted until 0.01%. For example: for a 0.01% dilution, dilute 2 parts of

 ${\sf PROVEDYE}^{\tiny{\textcircled{\tiny 0}}}\ 0.5\%\ \text{with 100 parts of isotonic saline solution or water; for a 1.25\ mg/mL\ dilution\ in\ isotonic\ dilution\ dilu$ saline solution, dilute 1 part of PROVEDYE® 0.5% with 3 parts of isotonic saline solution.

Any unused product or waste material should be disposed of in accordance with local requirements

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PROVEDYE®	USE	METHOD OF ADMINISTRATION (Proposed route of administration and dilution)	
GASTRO- DIGESTIVE SURGERY	Colon & bile leakage visualisation	Local injection via a catheter	1 to 20 mL of a diluted PROVEDYE® solution in isotonic saline solution
	Gastric & pancreatic leakage visualisation	Oral administration or via nasogastric tube	Diluted PROVEDYE® solution in water for injection
	Intra-operative delineation of anal fistula tract	Local injection directly in the external opening	Undiluted PROVEDYE® solution
ENT- ENDOCRINE SURGERY	Visualisation of sentinel lymph nodes in thyroid cancer	Peritumoral injection	Up to 0.5 mL diluted PROVEDYE® solution in isotonic saline solution
	Parathyroid glands identification	Local administration	1 mL of undiluted PROVEDYE® solution
	Temporalis fascia graft visualisation	Local injection directly into the graft	2 mL of undiluted PROVEDYE® solution
	Tracheo-oesophageal leakage visualisation	Oral administration via endotracheal tube or	Diluted PROVEDYE® solution in water for injection
	Intra-operative delineation of tracheo-oesophageal fistula tract	oesophageal catheter	