



**Previous Versions Product Information**

## EN – Instructions for use

**ProveDye®**

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 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.

**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.

PROVEDYE® 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.*

**ProveDye®**

Methylene Blue 0,5%

**SPECIAL PRECAUTIONS FOR USE**

(Document to keep in the operative theatre)

**PROVEDYE® 0.5% sterile solution**

Preparation for local or oral administration. Do not inject PROVEDYE® 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.

| PROVEDYE®                 | USE   | METHOD OF ADMINISTRATION<br>(Proposed route of administration and dilution) |   |
|---------------------------|---|---|---|
| BREAST SURGERY            | Visualisation of sentinel lymph nodes in breast cancer                                  | Peritumoral or subareolar injection   | 2 mL (or less) of 1.25 mg/mL solution of PROVEDYE® diluted in isotonic saline solution      |
|                           | Visualisation during transaxillary endoscopy in breast surgery                          | Local injection directly into the infra-mammary fold                        | 1 mL of undiluted PROVEDYE® solution  |
|                           | Nipple discharge visualisation  | Local injection directly into the breast duct                               | 2 mL of undiluted PROVEDYE® solution  |
| URO-GYNECOLOGICAL 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 colorectal-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 |

## Previous Version Product Information

### **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.

### **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 discolouration, 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 taken.
- 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**

36 months

### **CONDITIONING:**

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

### **STORAGE:**

Do not refrigerate PROVEDYE® under 8°C.

Do not freeze.

Keep the ampoule in the original package to protect it from light.

### **PUBLICATION DATE :**

IFU version 16 - Last revision: 12/2022.



**Provepharm S.A.S.**  
22 Rue Marc Donadille 13013 Marseille, France  
[www.provepharm.com](http://www.provepharm.com)

## **ProveDye®**

### **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, 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.

| PROVEDYE®                | USE  | METHOD OF ADMINISTRATION<br>(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 oesophageal catheter           | Diluted PROVEDYE® solution in water for injection                      |
|                          | Intra-operative delineation of tracheo-oesophageal fistula tract |   |  |



28063996

## Instruction for use

EN

### 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.**

### 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.

### METHOD OF ADMINISTRATION AND DOSAGE:

The PROVEDYE® 0.5% Methylene Blue sterile solution can be administered:

- Undiluted 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*

### 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 users.



**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.

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                             |   |
|--|--|--|---|
| <b>ALL SURGICAL DEPARTMENTS</b>              | <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 |
| <b>URO-GYNE-COLOGICAL AND BREAST SURGERY</b> | <b>Intra-operative delineation of vagina/ utero-vesical or colorecto-vesical fistula tract</b> | Local injection                                      | 200 – 300 ml of diluted ProveDye® solution    |
|  | <b>Ureter leaks and anastomosis visualisation during colorectal or vascular surgery</b>        | Local retrograde injection via a urinary catheter    | Diluted ProveDye® solution                    |
|  | <b>Visualisation during transaxillary endoscopy in breast surgery</b>                          | 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          |

## Previous Version Product Information

- > 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 lose 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 discolouration, 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.

### Note to the user

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

**SHELF-LIFE:** 36 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 15 - Last revision: 09/2021.



**Provepharm S.A.S.  
22 Rue Marc Donadille 13013 Marseille, France  
[www.provepharm.com](http://www.provepharm.com)**

**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.**

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.

| <b>PROVEDYE®</b>                | <b>USE</b>  | <b>METHOD OF ADMINISTRATION</b>                                      |  |
|---------------------------------|---|--|--|
| <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> |  |  |

**Provepharm\***

Life Solutions

**Previous Version Product Information**

**Instruction for use**

**ProveDye®**  
Methylene Blue 0,5%

**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.



2797 STERILE



**Provepharm®**

*Life Solutions*

**SPECIAL PRECAUTIONS FOR USE**

**ProveDye®**

(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                             |   |
|---|---|--|---|
| <b>ALL SURGICAL DEPARTMENTS</b>             | <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 |
| <b>URO-GYNECOLOGICAL AND BREAST SURGERY</b> | <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 during colorectal or vascular surgery</b>       | Local retrograde injection via a urinary catheter    | Diluted ProveDye® solution                    |
|   | <b>Visualisation during transaxillary endoscopy in breast surgery</b>                         | 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          |

**Provepharm®**

*Life Solutions*

## Previous Version Product Information

### **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 :**

IFU version 14 - Last revision: 10/2020.



**Provepharm S.A.S.**  
22 Rue Marc Donadille 13013 Marseille, France  
[www.provepharm.com](http://www.provepharm.com)

**Provepharm**   
Life Solutions



Methylene Blue 0,5%

### **SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

**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   |  |
|---------------------------------|---|--|--|
| <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 tracheo-oesophageal fistula tract</b> |  |  |

**Provepharm**   
Life Solutions

**Instruction for use**

**ProveDye®**  
Methylene Blue 0,5%

**COMPOSITION:**

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

**INDICATIONS:**

Marker for surgical visualization such as intra operative seal tests, leakages visualization 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 depends on the destination of the coloration. PROVEDYE® could be diluted until 0.01%.

*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.



**Provepharm®**  
Life Solutions

**SPECIAL PRECAUTIONS FOR USE**

**ProveDye®**

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

| PROVEDYE®                            | USE  | METHOD OF ADMINISTRATION<br>(route of administration and proposed dilution) |  |
|--------------------------------------|--|---|--|
| ALL SURGICAL DEPARTMENTS             | Bladder leaks visualization  | Local injection via a urinary catheter (Foley)                              | 200 – 300 ml of a ProveDye® solution diluted in normal saline solution               |
|                                      | Cysts delineation  | Local injection directly into the cyst                                      | 0.1 to 0.5 ml of ProveDye® solution directly   |
| URO-GYNECOLOGICAL AND BREAST SURGERY | Intra-operative delineation of vagina/uretero-vesical or colorecto-vesical fistula tract | Local injection   | 200 – 300 ml of a ProveDye® solution diluted in normal saline solution at 2 to 0.05% |
|                                      | Ureter leaks and anastomosis visualization during colorectal or vascular surgery         | Local retrograde injection via a urinary catheter                           | ProveDye® solution diluted in normal saline solution at around 0.05%                 |
|                                      | Visualization during transaxillary endoscopy in breast surgery                           | Local injection directly into the infra-mammary fold                        | 1 to 3 ml of ProveDye® solution directly   |
|                                      | Nipple discharge visualization   | Local injection directly into the breast duct                               | 1 to 3 ml of ProveDye® solution directly   |

**Provepharm®**  
Life Solutions

**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 :**

Last revision : 03-2019.

**Provepharm S.A.S.**

**22 Rue Marc Donadille 13013 Marseille, France**

[www.provepharm.com](http://www.provepharm.com)

**Provepharm\***  
Life Solutions



Methylene Blue 0,5%

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

| PROVEDYE®                       | USE   | METHOD OF ADMINISTRATION<br>(route of administration and proposed dilution) |   |
|---------------------------------|---|---|---|
| <b>GASTRO-DIGESTIVE SURGERY</b> | <b>Colon &amp; bile leakage visualization</b>                           | Local injection via a catheter  | 1 to 20 ml of a ProveDye® solution diluted in normal saline solution at 5 to 0.02% dilution |
|                                 | <b>Gastric &amp; pancreatic leakage visualization</b>                   | Oral administration or via nasogastric tube                                 | ProveDye® solution diluted in water for injection   |
|                                 | <b>Intra-operative delineation of anal fistula tract</b>                | Local injection directly in the external opening                            | ProveDye® solution directly   |
| <b>ENT-ENDOCRINE SURGERY</b>    | <b>Parathyroid glands identification</b>                                | Local administration  | 1 ml of ProveDye® solution directly   |
|                                 | <b>Temporalis fascia graft visualization</b>                            | Local injection directly into the graft                                     | 2 ml of ProveDye® solution directly   |
|                                 | <b>Tracheo-oesophageal leakage visualization</b>                        | Oral administration or via endotracheal tube or oesophageal catheter        | ProveDye® solution diluted in water for injection   |
|                                 | <b>Intra-operative delineation of trachea-oesophageal fistula tract</b> |   |   |

**Provepharm\***  
Life Solutions

**Instruction for use**

**ProveDye®**  
Methylene Blue 0,5%

**COMPOSITION:**

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

**INDICATIONS:**

Visualization aid for surgical procedures such as:

- Delineation of tissues and operative pieces,
- Seal test for sutures, detection of leaks,
- Fistula detection.

**METHOD OF ADMINISTRATION AND DOSAGE:**

A preoperative assessment is recommended before using PROVEDYE®.

PROVEDYE® may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%.

PROVEDYE® may be placed in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of certain organs or placed in contact with the epithelium of the organ via the existing natural orifices.

PROVEDYE® can also be administered orally after dilution.

**CONTRAINDICATIONS:**

Do not administrate 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 Pregnancy or breastfeeding PROVEDYE® should be avoided,
- in case of Glucose-6-Phosphate Dehydrogenase deficiency.

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



2797 STERILE



**Provepharm®**  
Life Solutions

**SPECIAL PRECAUTIONS FOR USE**

**ProveDye®**

(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® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                          | USE OF PROVEDYE®   | METHOD OF ADMINISTRATION   | FIS-TULA | LEAK-AGE | DELIN-EATION |
|--------------------------|--|--|----------|----------|--------------|
| URO-GYNECO SURGERY       | > Ureterovesical fistula detection<br>> Vesicovaginal fistula detection<br><br>> Colo-vesical fistula detection<br>> Rectourethral fistula detection                     | > Via an urinary catheter<br>> Into the vagina during a cystoscopy (200 mL of diluted ProveDye®)<br>> Via an urinary catheter<br>> Via an urethral catheter  | X        |          |              |
|                          | > Ureter leakage detection<br>> Vesicourethral anastomosis Detection   | > Via a urinary catheter (5 mL of diluted ProveDye® in normal saline solution)   |          | X        |              |
|                          | > Identification of the processus patent vaginalis (PPV) and prevention of hydrocele<br>> Localization aid of tunical and urethral tears in corpora cavernosa            | > In hydrocele (between tunica vaginalis and albugina) (0,6-6 mL of ProveDye®)<br>> Into the corpora cavernosa via the urethral meatus   |          |          | X            |
| GASTRO-DIGESTIVE SURGERY | > Anal fistula detection<br>> Colo-vesical fistula detection<br>> Rectourethral fistula detection<br>> Oesophageal fistula detection                                     | > Via an external catheter<br>> Via an urinary catheter<br>> Via an urethral catheter<br>> Via oral administration (4 mL of ProveDye® in 30 mL of water)   | X        |          |              |
|                          | > Colon leakage detection<br><br>> Gastric leakage detection<br>> Bile leakage detection<br><br>> Pancreatic leakage detection<br>> Esophagus and lung leakage detection | > Via a rectal catheter (1000mL of normal saline solution containing 20mL of ProveDye®)<br>> Via a nasogastric tube<br>> Via a catheter (4mL of ProveDye® in 20 mL of normal saline solution)<br><br>> Local administration and via oesophageal catheter (4-40 mL of ProveDye® diluted in 20-1000 mL of water or normal saline solution) |          | X        |              |

**Provepharm®**  
Life Solutions

**WARNINGS:**

Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly. Do not use PROVEDYE® if the solution is colourless.

Do not use a damaged ampoule of Provedye®.

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.

**PRECAUTIONS:**

PROVEDYE® must be used by a healthcare professional.

The wearing of gloves is recommended for users.

PROVEDYE® must be used immediately after opening or dilution.

Protective measures against exposure to strong light, including that within instruments such as pulse oximeters should be taken, because there is a risk of cutaneous photosensitivity reaction.

**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 or 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 :**

Last revision : 01-2019.

**Provepharm S.A.S.**

**22 Rue Marc Donadille 13013 Marseille, France**

[www.provepharm.com](http://www.provepharm.com)

**Provepharm**   
Life Solutions

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                   | USE OF PROVEDYE®  | METHOD OF ADMINISTRATION   | FIS-TULA | LEAK-AGE | DELIN-EATION |
|-------------------|---|--|----------|----------|--------------|
| GENERAL SURGERY   | > Delineation of cysts  | > Directly into the cyst (0.2mL of ProveDye®)  |          |          | X            |
| BREAST SURGERY    | > Visualisation aid during transaxillary endoscopy<br>> Visualization aid for nipple discharge  | > At the infra-mammary fold (1-2 mL of ProveDye®)<br>> Directly into the breast duct (2-6 mL of ProveDye®)                   |          |          | X            |
| ENDOCRINE SURGERY | > Identification of the parathyroid glands, recurrent nerves and inferior thyroid arteries  | > Local administration (1 mL of ProveDye®)   |          |          | X            |
| ENT SURGERY       | > Preauricular sinuses (PAS) and branchial sinuses fistula (BSF) detection<br>> Tracheoesophageal / Esophago-respiratory fistulae detection<br>> Stain of temporalis fascia graft | > (2-6 mL of ProveDye®)<br>> Via an endotracheal tube during a bronchoscopy<br>> Directly into the graft (2 mL of ProveDye®) | X        |          | X            |

**Provepharm**   
Life Solutions

# Instruction for use



## COMPOSITION:

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

## INDICATIONS:

Visualization aid for surgical procedures such as:

- Delineation of tissues and operative pieces,
- Seal test for sutures, detection of leaks,
- Fistula detection.

## METHOD OF ADMINISTRATION AND DOSAGE:

A preoperative assessment is recommended before using PROVEDYE®.

PROVEDYE® may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%.

PROVEDYE® may be placed in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the organ via the existing natural orifices.

PROVEDYE® can also be administered orally after dilution.

## CONTRAINDICATIONS:

Do not administrate 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 Pregnancy or breastfeeding PROVEDYE® should be avoided,
- in case of Glu cose-6-Phosphate Dehydrogenase deficiency.

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

**Provepharm\***

Life Solutions

CE 0086

STERILE

STERILIZE

X



8°C



## SPECIAL PRECAUTIONS FOR USE

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                          | USE OF PROVEDYE®  | METHOD OF ADMINISTRATION   | FIS-TULA | LEAK-AGE | DELIN-EATION |
|--------------------------|---|--|----------|----------|--------------|
| URO-GYNECO SURGERY       | <ul style="list-style-type: none"> <li>• Ureterovesical fistula detection</li> <li>• Vesicovaginal fistula detection</li> <li>• Colo-vesical fistula detection</li> <li>• Rectourethral fistula detection</li> </ul>  | <ul style="list-style-type: none"> <li>➢ Via an urinary catheter</li> <li>➢ Into the vagina during a cystoscopy (200 mL of diluted ProveDye®)</li> <li>➢ Via an urinary catheter</li> <li>➢ Via an urethral catheter</li> </ul>                                | X        |          |              |
|                          | <ul style="list-style-type: none"> <li>• Ureter leakage detection</li> <li>• Vesicourethral anastomosis detection</li> </ul>  | <ul style="list-style-type: none"> <li>➢ Via a urinary catheter (5 mL of diluted ProveDye® in normal saline solution)</li> </ul>   |          | X        |              |
|                          | <ul style="list-style-type: none"> <li>• Identification of the processus patent vaginalis (PPV) and prevention of hydrocele</li> <li>• Localization aid of tunical and urethral tears in corpora cavernosa</li> </ul> | <ul style="list-style-type: none"> <li>➢ In hydrocele (between tunica vaginalis and albuginea) (0.6-6 mL of ProveDye®)</li> <li>➢ Into the corpora cavernosa via the urethral meatus</li> </ul>  |          |          | X            |
|                          | <ul style="list-style-type: none"> <li>• Anal fistula detection</li> <li>• Colo-vesical fistula detection</li> <li>• Rectourethral fistula detection</li> <li>• Oesophageal fistula detection</li> </ul>              | <ul style="list-style-type: none"> <li>➢ Via an external catheter</li> <li>➢ Via an urinary catheter</li> <li>➢ Via an urethral catheter</li> <li>➢ Via oral administration (4 mL of ProveDye® in 30 mL of water)</li> </ul>                                   | X        |          |              |
| GASTRO-DIGESTIVE SURGERY | <ul style="list-style-type: none"> <li>• Colon leakage detection</li> <li>• Gastric leakage detection</li> <li>• Bile leakage detection</li> </ul>  | <ul style="list-style-type: none"> <li>➢ Via a rectal catheter (1000 mL of normal saline solution containing 20 mL of ProveDye®)</li> <li>➢ Via a nasogastric tube</li> <li>➢ Via a catheter (4 mL of ProveDye® in 20 mL of normal saline solution)</li> </ul> |          | X        |              |
|                          | <ul style="list-style-type: none"> <li>• Pancreatic leakage detection</li> <li>• Esophagus and lung leakage detection</li> </ul>  | <ul style="list-style-type: none"> <li>➢ Local administration and via oesophageal catheter (4-40 mL of ProveDye® diluted in 20-1000 mL of water or normal saline solution)</li> </ul>  |          |          |              |

**WARNINGS:**

Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly. Do not use PROVEDYE® if the solution is colourless.

Do not use a damaged ampoule of Provedye®.

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.

**PRECAUTIONS:**

PROVEDYE® must be used by a healthcare professional.

The wearing of gloves is recommended for users.

PROVEDYE® must be used immediately after opening or dilution.

Protective measures against exposure to strong light, including that within instruments such as pulse oximeters should be taken, because there is a risk of cutaneous photosensitivity reaction.

**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 discolouration, 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 or 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 :**

Last revision : 11-2018.

**Provepharm S.A.S.**

**22 Rue Marc Donadille 13013 Marseille, France**

[www.provepharm.com](http://www.provepharm.com)

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%. Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                   | USE OF PROVEDYE®   | METHOD OF ADMINISTRATION   | FIS-TULA | LEAK-AGE | DELIN-EATION |
|-------------------|--|--|----------|----------|--------------|
| GENERAL SURGERY   | • Delineation of cysts   | ➢ Directly into the cyst (0,2 mL of ProveDye®)   |          |          | X            |
| BREAST SURGERY    | • Visualisation aid during transaxillary endoscopy<br>• Visualization aid for nipple discharge   | ➢ At the infra-mammary fold (1-2 mL of ProveDye®)<br>➢ Directly into the breast duct (2-6 mL of ProveDye®)                   |          |          | X            |
| ENDOCRINE SURGERY | • Identification of the parathyroid glands, recurrent nerves and inferior thyroid arteries   | ➢ Local administration (1 mL of ProveDye®)   |          |          | X            |
| ENT SURGERY       | • Preauricular sinuses (PAS) and branchial sinuses fistula (BSF) detection<br>• Tracheoesophageal/Eosphagorespiratory fistulae detection<br>• Stain of temporalis fascia graft | ➢ (2-6 mL of ProveDye®)<br>➢ Via an endotracheal tube during a bronchoscopy<br>➢ Directly into the graft (2 mL of ProveDye®) | X        |          | X            |

# Instruction for use



## **COMPOSITION :**

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

## **INDICATIONS :**

**Visualization aid for surgical procedures such as :**

- **Delineation of tissues and operative pieces,**
- **Seal test for sutures, detection of leaks,**
- **Fistula detection.**

## **METHOD OF ADMINISTRATION AND DOSAGE :**

A preoperative assessment is recommended before using PROVEDYE®.

PROVEDYE® may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%.

PROVEDYE® may be placed in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the organ via the existing natural orifices.

PROVEDYE® can also be administered orally after dilution.

## **CONTRAINDICATIONS :**

Do not administrate PROVEDYE® :

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

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



## **SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use. Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                                 | <b>USE OF PROVEDYE®</b>  | <b>METHOD OF ADMINISTRATION</b>  | <b>FIS-TULA</b> | <b>LEAK-AGE</b> | <b>DELIN-EATION</b> |
|---------------------------------|--|--|-----------------|-----------------|---------------------|
| <b>URO-GYNECO SURGERY</b>       | • Ureterovesical fistula detection   | ➢ Via an urinary catheter  | X               |                 |                     |
|                                 | • Vesicovaginal fistula detection  | ➢ Into the vagina during a cystoscopy (200mL of diluted Methylene Blue)  |                 |                 |                     |
|                                 | • Colo-vesical fistula detection   | ➢ Via an urinary catheter  | X               |                 |                     |
|                                 | • Rectourethral fistula detection  | ➢ Via an urethral catheter   |                 |                 |                     |
|                                 | • Ureter leakage detection   | ➢ Via a urinary catheter (5mL of diluted Methylene Blue in normal saline solution)   |                 | X               |                     |
| <b>GASTRO-DIGESTIVE SURGERY</b> | • Vesicourethral anastomosis detection   | ➢ In hydrocele (between tunica vaginalis and albugina) (0.6-6mL of Methylene Blue)   |                 |                 |                     |
|                                 | • Identification of the processus patent vaginalis (PPV) and prevention of hydrocele | ➢ Into the corpora cavernosa via the urethral meatus   |                 |                 | X                   |
|                                 | • Localization aid of tunical and urethral tears in corpora cavernosa                |  |                 |                 |                     |
|                                 | • Anal fistula detection   | ➢ Via an external catheter   | X               |                 |                     |
|                                 | • Colo-vesical fistula detection   | ➢ Via an urinary catheter  |                 |                 |                     |
|                                 | • Rectourethral fistula detection  | ➢ Via an urethral catheter   |                 |                 |                     |
|                                 | • Oesophageal fistula detection  | ➢ Via oral administration (4mL of Methylene Blue in 30mL of water)   |                 |                 |                     |
|                                 |  |  |                 |                 |                     |
|                                 | • Colon leakage detection  | ➢ Via a rectal catheter (1000mL of normal saline solution containing 20mL of Methylene Blue)   |                 |                 |                     |
|                                 | • Gastric leakage detection  | ➢ Via a nasogastric tube   |                 |                 |                     |
|                                 | • Bile leakage detection   | ➢ Via a catheter (4mL of Methylene Blue in 20 mL of normal saline solution)  |                 | X               |                     |
|                                 | • Pancreatic leakage detection   | ➢ Local administration and via oesophageal catheter (4-40mL of Methylene Blue diluted in 20-1000mL of water or normal saline solution) |                 |                 |                     |
|                                 | • Esophagus and lung leakage detection   |  |                 |                 |                     |

**WARNINGS :**

Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly.

Do not use PROVEDYE® if the solution is colourless.

Do not use a damaged ampoule of Provedye®.

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.

**PRECAUTIONS :**

PROVEDYE® must be used by a healthcare professional.

The wearing of gloves is recommended for users.

PROVEDYE® must be used immediately after opening or dilution.

**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 discolouration, urticaria.
- Nervous system : headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- 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.
- Ophtalmologic: 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 or freeze.

Keep the ampoule in the original package to protect it from light.

**CONDITIONING :**

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



*Life Solutions*

**PUBLICATION DATE :**

Last revision : 11-2017.

**Provepharm S.A.S. 22 Rue Marc Donadille 13013 Marseille, France**

[www.provepharm.com](http://www.provepharm.com)

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use. Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                   | USE OF PROVEDYE®  | METHOD OF ADMINISTRATION  | FIS-TULA | LEAK-AGE | DELIN-EATION |
|-------------------|---|---|----------|----------|--------------|
| GENERAL SURGERY   | • Delineation of cysts  | ➢ Directly into the cyst<br>(0.2mL of Methylene Blue)   |          |          | X            |
| BREAST SURGERY    | • Visualisation aid during transaxillary endoscopy<br>• Visualization aid for nipple discharge  | ➢ At the infra-mammary fold<br>(1-2mL of Methylene Blue)<br>➢ Directly into the breast duct<br>(2-6mL of Methylene Blue)                    |          |          | X            |
| ENDOCRINE SURGERY | • Identification of the parathyroid glands, recurrent nerves and inferior thyroid arteries  | ➢ Local administration<br>(1mL of Methylene Blue)   |          |          | X            |
| ENT SURGERY       | • Preauricular sinuses (PAS) and branchial sinuses fistula (BSF) detection<br>• Tracheoesophageal/Eosophagorespiratory fistulae detection<br><br>• Stain of temporalis fascia graft | ➢ (2-6mL of Methylene Blue)<br>➢ Via an endotracheal tube during a bronchoscopy<br><br>➢ Directly into the graft<br>(2mL of Methylene Blue) | X        |          | X            |

## Instruction for use



0,5%

**COMPOSITION :**

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

**INDICATIONS :****Visualization aid for surgical procedures such as :**

- Delineation of tissues and operative pieces,
- Seal test for sutures, detection of leaks,
- Fistula detection.

**METHOD OF ADMINISTRATION AND DOSAGE :**

A preoperative assessment is recommended before using PROVEDYE®.

PROVEDYE® may be diluted in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® can also be administered orally after dilution in water.

The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%.

PROVEDYE® may be placed in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the organ via the existing natural orifices.

**CONTRAINDICATIONS :**

Do not administrate PROVEDYE® :

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

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



0086

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use. Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                    | USE OF PROVEDYE®   | METHOD OF ADMINISTRATION  | FIS-TULA | LEAK-AGE | DELIN-EATION |
|--------------------|--|---|----------|----------|--------------|
| URO-GYNECO SURGERY | <ul style="list-style-type: none"> <li>• Ureterovesical fistula detection</li> <li>• Vesicovaginal fistula detection</li> <li>• Colo-vesical fistula detection</li> <li>• Rectourethral fistula detection</li> </ul>                       | <ul style="list-style-type: none"> <li>&gt; Via an urinary catheter</li> <li>&gt; Into the vagina during a cystoscopy (200mL of diluted Methylene Blue)</li> <li>&gt; Via an urinary catheter</li> <li>&gt; Via an urethral catheter</li> </ul>   | X        |          |              |
|                    | <ul style="list-style-type: none"> <li>• Ureter leakage detection</li> <li>• Vesicourethral anastomosis detection</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Via a urinary catheter (5mL of diluted Methylene Blue in normal saline solution)</li> </ul>   |          | X        |              |
|                    | <ul style="list-style-type: none"> <li>• Identification of the processus patent vaginalis (PPV) and prevention of hydrocele</li> <li>• Localization aid of tunical and urethral tears in corpora cavernosa</li> </ul>                      | <ul style="list-style-type: none"> <li>&gt; In hydrocele (between tunica vaginalis and albugina) (0.6-6mL of Methylene Blue)</li> <li>&gt; Into the corpora cavernosa via the urethral meatus</li> </ul>  |          |          | X            |
|                    | <ul style="list-style-type: none"> <li>• Anal fistula detection</li> <li>• Colo-vesical fistula detection</li> <li>• Rectourethral fistula detection</li> <li>• Oesophageal fistula detection</li> </ul>                                   | <ul style="list-style-type: none"> <li>&gt; Via an external catheter</li> <li>&gt; Via an urinary catheter</li> <li>&gt; Via an urethral catheter</li> <li>&gt; Via oral administration (4mL of Methylene Blue in 30mL of water)</li> </ul>   | X        |          |              |
|                    | <ul style="list-style-type: none"> <li>• Colon leakage detection</li> <li>• Gastric leakage detection</li> <li>• Bile leakage detection</li> <li>• Pancreatic leakage detection</li> <li>• Esophagus and lung leakage detection</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Via a rectal catheter (1000mL of normal saline solution containing 20mL of Methylene Blue)</li> <li>&gt; Via a nasogastric tube</li> <li>&gt; Via a catheter (4mL of Methylene Blue in 20 mL of normal saline solution)</li> <li>&gt; Local administration and via oesophageal catheter (4-40mL of Methylene Blue diluted in 20-1000mL of water or normal saline solution)</li> </ul> |          | X        |              |

# Previous Version Product Information

## **WARNINGS :**

Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly.

Do not use PROVEDYE® if the solution is colourless.

Do not use a damaged ampoule of Provedye®.

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.

## **PRECAUTIONS :**

PROVEDYE® must be used by a healthcare professional.

The wearing of gloves is recommended for users.

PROVEDYE® must be used immediately after opening or dilution.

## **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 discolouration, urticaria.
- Nervous system : headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- 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.
- Ophthalmologic: 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 or freeze.

Keep the ampoule in the original package to protect it from light.

## **CONDITIONING :**

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

## **PUBLICATION DATE :**

Last revision : 07-2017.



**Provepharm S.A.S. 22 Rue Marc Donadille 13013 Marseille, France**

[www.provepharm.com](http://www.provepharm.com)

## **SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use. Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                          | <b>USE OF PROVEDYE®</b>  | <b>METHOD OF ADMINISTRATION</b>  | <b>FIS-TULA</b> | <b>LEAK-AGE</b> | <b>DELIN-EATION</b> |
|--------------------------|--|--|-----------------|-----------------|---------------------|
| <b>GENERAL SURGERY</b>   | • Delineation of cysts   | ➢ Directly into the cyst<br>(0.2mL of Methylene Blue)  |                 |                 | X                   |
| <b>BREAST SURGERY</b>    | • Visualisation aid during transaxillary endoscopy<br>• Visualization aid for nipple discharge   | ➢ At the infra-mammary fold<br>(1-2mL of Methylene Blue)<br>➢ Directly into the breast duct<br>(2-6mL of Methylene Blue) |                 |                 | X                   |
| <b>ENDOCRINE SURGERY</b> | • Identification of the parathyroid glands, recurrent nerves and inferior thyroid arteries   | ➢ Local administration<br>(1mL of Methylene Blue)  |                 |                 | X                   |
| <b>ENT SURGERY</b>       | • Preauricular sinuses (PAS) and branchial sinuses fistula (BSF) detection<br>• Tracheoesophageal/Eosphagorespiratory fistulae detection | ➢ (2-6mL of Methylene Blue)<br>➢ Via an endotracheal tube during a bronchoscopy  | X               |                 |                     |
|                          | • Stain of temporalis fascia graft   | ➢ Directly into the graft<br>(2mL of Methylene Blue)   |                 |                 | X                   |

## Instruction for use



0,5%

**COMPOSITION :**

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

**INDICATIONS :****Visualization aid for surgical procedures such as :**

- Delineation of tissues and operative pieces,
- Seal test for sutures, detection of leaks,
- Fistula detection.

**METHOD OF ADMINISTRATION AND DOSAGE :**

A preoperative assessment is recommended before using PROVEDYE®.

PROVEDYE® may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%.

PROVEDYE® may be placed in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the organ via the existing natural orifices.

PROVEDYE® can also be administered orally after dilution.

**CONTRAINDICATIONS :**

Do not administrate PROVEDYE® :

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

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

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only). PROVEDYE® may be diluted in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                          | <b>USE OF PROVEDYE®</b>  | <b>METHOD OF ADMINISTRATION</b>   | <b>FIS-TULA</b> | <b>LEAK-AGE</b> | <b>DELIN-EATION</b> |
|--------------------------|--|---|-----------------|-----------------|---------------------|
| URO-GYNECO SURGERY       | <ul style="list-style-type: none"> <li>• Ureterovesical fistula detection</li> <li>• Vesicovaginal fistula detection</li> <li>• Colo-vesical fistula detection</li> <li>• Rectourethral fistula detection</li> </ul>                       | <ul style="list-style-type: none"> <li>➢ Via an urinary catheter</li> <li>➢ Into the vagina during a cystoscopy (200mL of diluted Methylene Blue)</li> <li>➢ Via an urinary catheter</li> <li>➢ Via an urethral catheter</li> </ul>   | X               |                 |                     |
|                          | <ul style="list-style-type: none"> <li>• Ureter leakage detection</li> <li>• Vesicourethral anastomosis detection</li> </ul>   | <ul style="list-style-type: none"> <li>➢ Via a urinary catheter (5mL of diluted Methylene Blue in normal saline solution)</li> </ul>  |                 | X               |                     |
|                          | <ul style="list-style-type: none"> <li>• Identification of the processus patent vaginalis (PPV) and prevention of hydrocele</li> <li>• Localization aid of tunical and urethral tears in corpora cavernosa</li> </ul>                      | <ul style="list-style-type: none"> <li>➢ In hydrocele (between tunica vaginalis and albugina) (0.6-6mL of Methylene Blue)</li> <li>➢ Into the corpora cavernosa via the urethral meatus</li> </ul>  |                 |                 | X                   |
|                          | <ul style="list-style-type: none"> <li>• Anal fistula detection</li> <li>• Colo-vesical fistula detection</li> <li>• Rectourethral fistula detection</li> <li>• Oesophageal fistula detection</li> </ul>                                   | <ul style="list-style-type: none"> <li>➢ Via an external catheter</li> <li>➢ Via an urinary catheter</li> <li>➢ Via an urethral catheter</li> <li>➢ Via oral administration (4mL of Methylene Blue in 30mL of water)</li> </ul>   | X               |                 |                     |
| GASTRO-DIGESTIVE SURGERY | <ul style="list-style-type: none"> <li>• Colon leakage detection</li> <li>• Gastric leakage detection</li> <li>• Bile leakage detection</li> <li>• Pancreatic leakage detection</li> <li>• Esophagus and lung leakage detection</li> </ul> | <ul style="list-style-type: none"> <li>➢ Via a rectal catheter (1000mL of normal saline solution containing 20mL of Methylene Blue)</li> <li>➢ Via a nasogastric tube</li> <li>➢ Via a catheter (4mL of Methylene Blue in 20 mL of normal saline solution)</li> <li>➢ Local administration and via oesophageal catheter (4-40mL of Methylene Blue diluted in 20-1000mL of water or normal saline solution)</li> </ul> |                 | X               |                     |
|                          |  |   |                 |                 |                     |

# Previous Version Product Information

## **WARNINGS :**

Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly.

Do not use PROVEDYE® if the solution is colourless.

Do not use a damaged ampoule of Provedye®.

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.

## **PRECAUTIONS :**

PROVEDYE® must be used by a healthcare professional.

The wearing of gloves is recommended for users.

PROVEDYE® must be used immediately after opening or dilution.

## **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, urticarial.
- Nervous system : headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- 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.
- Ophthalmologic: 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 or freeze.

Keep the ampoule in the original package to protect it from light.

## **CONDITIONING :**

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

## **PUBLICATION DATE :**

Last revision : 09-2016.

**Provepharm S.A.S. 22 Rue Marc Donadille 13013 Marseille, France**

[www.provepharm.com](http://www.provepharm.com)



## **SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only). PROVEDYE® may be diluted in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

|                          | <b>USE OF PROVEDYE®</b>  | <b>METHOD OF ADMINISTRATION</b>   | <b>FIS-TULA</b> | <b>LEAK-AGE</b> | <b>DELIN-EATION</b> |
|--------------------------|--|---|-----------------|-----------------|---------------------|
| <b>GENERAL SURGERY</b>   | • Delineation of cysts   | ➢ Directly into the cyst<br>(0.2mL of Methylene Blue)   |                 |                 | X                   |
| <b>BREAST SURGERY</b>    | • Visualisation aid during transaxillary endoscopy<br>• Visualization aid for nipple discharge   | ➢ At the infra-mammary fold<br>(1-2mL of Methylene Blue)<br>➢ Directly into the breast duct<br>(2-6mL of Methylene Blue)                |                 |                 | X                   |
| <b>ENDOCRINE SURGERY</b> | • Identification of the parathyroid glands, recurrent nerves and inferior thyroid arteries   | ➢ Local administration<br>(1mL of Methylene Blue)   |                 |                 | X                   |
| <b>ENT SURGERY</b>       | • Preauricular sinuses (PAS) and branchial sinuses fistula (BSF) detection<br>• Tracheoesophageal/Eosphagorespiratory fistulae detection<br>• Stain of temporalis fascia graft | ➢ (2-6mL of Methylene Blue)<br>➢ Via an endotracheal tube during a bronchoscopy<br>➢ Directly into the graft<br>(2mL of Methylene Blue) | X               |                 | X                   |

**COMPOSITION :**

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

**INDICATIONS :**

Visualization aid for surgical procedures such as :

- Delineation of tissues and operative pieces,
- Seal test for sutures, detection of leaks,
- Fistula detection.

**METHOD OF ADMINISTRATION AND DOSAGE :**

A preoperative assessment is recommended before using PROVEDYE®.

PROVEDYE® may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%.

PROVEDYE® may be placed in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the organ via the existing natural orifices.

PROVEDYE® can also be administered orally after dilution.

**CONTRAINDICATIONS :**

Do not administrate PROVEDYE® :

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

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

**SPECIAL PRECAUTIONS FOR USE**

(to keep in the operative theatre)

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

Preparation for local or oral administration.

Do not inject PROVEDYE® in intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.

PROVEDYE® may be diluted in water (for oral use only). PROVEDYE® may be diluted in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

| USE OF PROVEDYE®  | METHOD OF ADMINISTRATION   | FISTULA   | LEAKAGE  | DELINERATION   |
|---|--|---|--|--|
| <ul style="list-style-type: none"> <li>• Uterovaginal fistula detection</li> <li>• Vesicovaginal fistula detection</li> <li>• Col-vesical fistula detection</li> <li>• Rectourethral fistula detection</li> <li>• Ureter leakage detection</li> <li>• Vesicourethral anastomosis detection</li> <li>• Identification of the processus patent vaginalis (PPV) and prevention of hydrocele</li> <li>• Localization aid of tunical and urethral tears in corpora cavernosa</li> <li>• Anal fistula detection</li> <li>• Colo-rectal fistula detection</li> <li>• Rectovaginal fistula detection</li> <li>• Oesophageal fistula detection</li> <li>• Colon leakage detection</li> <li>• Gastric leakage detection</li> <li>• Bladder leakage detection</li> <li>• Pancreatic leakage detection</li> <li>• Esophagus and lung leakage detection</li> </ul> | <ul style="list-style-type: none"> <li>✓ Via an urinary catheter<br/>into the vagina during a cystoscopy<br/>(20ml of diluted Methylene Blue)</li> <li>✓ Via an urinary catheter</li> <li>✓ Via an urethral catheter</li> <li>✓ Via a urinary catheter<br/>[5mL of diluted Methylene Blue in normal saline solution]</li> <li>✓ In hydrocele [between tunica vaginalis and albuginea]<br/>(0.5-5ml of Methylene Blue)</li> <li>✓ Into the corpora cavernosa via the urethral meatus</li> <li>✓ Via an external catheter</li> <li>✓ Via an urinary catheter</li> <li>✓ Via an urethral catheter</li> <li>✓ Via oral administration<br/>(4mL of Methylene Blue in 30mL of water)</li> <li>✓ Via a rectal catheter</li> <li>✓ Via an urinary catheter<br/>normal saline solution containing 20mL of Methylene Blue</li> <li>✓ Via a nasogastric tube</li> <li>✓ Via a catheter<br/>(4mL of Methylene Blue in 20 mL of normal saline solution)</li> <li>✓ Local administration and via oesophageal catheter<br/>(4-40mL of Methylene Blue diluted in 20-100mL of water or normal saline solution)</li> </ul> | <ul style="list-style-type: none"> <li>✓</li> </ul> | <ul style="list-style-type: none"> <li>✗</li> </ul> | <ul style="list-style-type: none"> <li>✗</li> </ul> |

# Previous Version Product Information

## WARNINGS :

Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly.  
Do not use PROVEDYE® if the solution is colourless.  
Do not use a damaged ampoule of Provedye®.  
PROVEDYE® is for single use only: discard any remaining solution after opening;  
In case of re-use of PROVEDYE®, there is a risk of decrease of technical performance such as contamination.  
PROVEDYE® should be disposed of in clinical waste.

## PRECAUTIONS :

PROVEDYE® must be used by a healthcare professional.  
The wearing of gloves is recommended for users.  
PROVEDYE® must be used immediately after opening or dilution.

## 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.
- Nervous system : headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- 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. Eye: 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 or freeze.  
Keep the ampoule in the original package to protect it from light.

## CONDITIONING :

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

## PUBLICATION DATE :

Last revision : 05-2016.



Provepharm S.A.S. 22 Rue Marc Donadille 13013  
Marseille, France [www.provepharm.com](http://www.provepharm.com)

## SPECIAL PRECAUTIONS FOR USE

(to keep in the operative theatre)

**PROVEDYE® 0.5% 2ml - Sterile solution.**  
Preparation for local or oral administration.  
Do not inject PROVEDYE® in Intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection.  
PROVEDYE® may be diluted in water (for oral use only). PROVEDYE® may be diluted in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.  
PROVEDYE® could be diluted until 0.01%.  
Additional information on the way in which PROVEDYE® can be administered is provided in the instructions for use.  
Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.

| ENT SURGERY  | ENDOCRINE SURGERY | BREAST SURGERY   | GENERAL SURGERY | USE OF PROVEDYE®                                  | METHOD OF ADMINISTRATION                                  | FISTULA | LEAKAGE | DELINeATION |
|--|-------------------|--|-----------------|---|---|---------|---------|-------------|
|  |                   | • Delineation of cysts   |                 |   | ✓ Directly into the cyst (0.2mL of Methylene Blue)        |         |         | ✗           |
|  |                   | • Visualisation aid during transaxillary endoscopy   |                 |   | ✓ At the inframammary fold (1-2mL of Methylene Blue)      |         |         |             |
|  |                   | • Visualization aid for nipple discharge   |                 |   | ✓ Directly into the breast duct (2-5mL of Methylene Blue) |         |         | ✗           |
|  |                   | • Identification of the parathyroid glands, recurrent nerves and inferior thyroid arteries |                 |   | ✓ Local administration (1mL of Methylene Blue)            |         |         | ✗           |
| • Preauricular sinuses (PAS) and branchial sinuses fistula (BSF) detection |                   | • Tracheoesophageal/Esophago-respiratory fistulae detection                                |                 |   | ✓ (2-5mL of Methylene Blue)                               |         |         |             |
| • Stain of temporalis fascia graft   |                   |  |                 | ✓ Directly into the graft (2mL of Methylene Blue) |   |         |         | ✗           |

# Previous Version Product Information

PROVEDYE® 0,5% Leaflet



## **Composition:**

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

## **Indications:**

Visualization aid for surgical procedures such as the delineation of tissues and operative pieces, seal test for sutures, detection of leaks, fistula detection.

## **Contraindications**

Do not administrate PROVEDYE®:

- In case of known hypersensitivity to methylene blue or to any other thiazine dyes;
- In case of treatment with selective serotonin reuptake inhibitors (SSRIs), bupropion, buspirone, clomipramine, mirtazapine and venlafaxine;
- In case of pregnancy or breastfeeding, PROVEDYE® should be avoided;
- In the case of Glucose-6-Phosphate Dehydrogenase deficiency.

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

## **Method of administration and dosage**

A preoperative assessment is recommended before

using PROVEDYE®.

PROVEDYE® may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

The PROVEDYE® dilution and volume to be administered depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%.

PROVEDYE® may be placed in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the organ via the existing natural orifices.

PROVEDYE® can also be administered orally after dilution.

## **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 discolouration, urticaria.
- Nervous system: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- 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 fluid infusion), necrosis (if extravasation occurs).

# Previous Version Product Information

- Renal: blue color of the urine.
- Respiratory, thoracic and mediastinal: dyspnea, tachypnea, hypoxia.
- Ophthalmologic: eye 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.

## Warnings

Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally, intra-amniotically or intraocularly.

Do not use PROVEDYE® if the solution is colourless.

Do not use a damaged ampoule of PROVEDYE®. PROVEDYE® is for single use only: discard any remaining solution after opening.

In case of re-use of PROVEDYE®, there is a risk of decrease of technical performance due to contamination.

PROVEDYE® should be disposed of in clinical waste.

## Precautions for use

PROVEDYE® must be used by a healthcare professional.

The wearing of gloves is recommended for users. PROVEDYE® must be used immediately after opening or dilution.

## Storage

Do not refrigerate PROVEDYE® under 8°C or freeze.

Keep the ampoule in the original packaging to protect it from light.

## Packaging:

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

## Publication date:

Last revision: 11/2015



**Provepharm S.A.S. 22 Rue Marc Donadille 13013  
Marseille, France [www.provepharm.com](http://www.provepharm.com)**

## SPECIAL PRECAUTIONS FOR USE (to keep in the operating room)

### PROVEDYE® 0.5% 2ml – Sterile solution

#### Preparation for local or oral administration

Do not inject PROVEDYE® in an intravenous, subcutaneous, intrathecal, intra-amniotic or intraocular injection. PROVEDYE® may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.



**Composition:**

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

**Indications:**

Visualization aid for surgical procedures such as the delineation of tissues and operative pieces, Seal test for sutures, detection of leaks, fistula detection.

**Contraindications**

Do not administrate PROVEDYE®:

- In case of known hypersensitivity to the methylene blue or to any other thiazine dyes;
- In case of treatment with Selective serotonin reuptake inhibitors (SSRIs), bupropion, buspirone, clomipramine, mirtazapine and venlafaxine;
- In case of Pregnancy or breastfeeding PROVEDYE® should be avoided;
- In case of Glucose-6-Phosphate Dehydrogenase deficiency.

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

**Method of administration and dosage**

A preoperative assessment is recommended before using PROVEDYE®. PROVEDYE® may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%. PROVEDYE® may be placed in contact with the anatomic structure after dilution. PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the epithelium of the organ via the existing natural orifices. PROVEDYE® can also be administered orally after dilution .

**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, urticarial.

- Nervous system: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.

- 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. Eye: 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.

**Warnings**

- Do not inject PROVEDYE® intravenously, subcutaneously, intrathecally and intra-amniotically
- Do not use PROVEDYE® if the solution is colourless;
- Do not use a damaged ampoule of Provedye®;
- PROVEDYE® is for single use only: discard any remaining solution after opening;
- In case of re-use of PROVEDYE®, there is a risk of decrease of technical performance such as contamination
- PROVEDYE® should be disposed of in clinical waste.

**Precautions**

- PROVEDYE® must be used by a healthcare professional.
- The wearing of gloves is recommended for users.
- PROVEDYE® must be used immediately after opening or dilution

**Storage**

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

**Conditioning:**

2ml ampoules, in packs of 5 or 20 ampoules

**Publication date**

Last revision: 08-2015



8°C



**ProVepharm**  
PROVENCE TECHNOLOGIES GROUP

**STERILE**

ProVepharm S.A.S ; 22 Rue Marc Donadille 13013  
Marseille, France [www.provepharm.com](http://www.provepharm.com)

**SPECIAL PRECAUTIONS FOR USE (to keep in the operative theatre)****PROVEDYE® 0.5% 2ml – Sterile solution**

Preparation for Local or Oral administration.

Do not inject PROVEDYE® in Intravenous, subcutaneous, intrathecal and intra-amniotic injection

PROVEDYE® may be diluted in water (for oral use only). PROVEDYE® may be diluted in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution. PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use. Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.



0086



**ProVepharm**  
PROVENCE TECHNOLOGIES GROUP

# Previous Version Product Information

PROVEDYE™ 0.5% Leaflet



## **Composition:**

Each ampoule of PROVEDYE™ contains 10 mg of methylene blue (Proveblue®) diluted in 2 ml of water solution for injection.

## **Indications:**

Visualization aid for surgical procedures such as the delineation of tissues and operative pieces, seal test for sutures, detection of leaks, fistula detection.

## **Contraindications**

Do not administrate PROVEDYE™ :

- In case of known hypersensitivity to methylene blue or to any other thiazine dyes;
- In case of treatment with selective serotonin reuptake inhibitors (SSRI), busropion, buspirone, clomipramine, mirtazapine and venlafaxine;
- In case of pregnancy or breastfeeding, PROVEDYE™ should be avoided;
- In the case of Glucose-6-Phosphate Dehydrogenase deficiency.

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

## **Method of administration and dosage**

A preoperative assessment is recommended before

using PROVEDYE™ .

PROVEDYE™ may be diluted in water (for oral use only) and in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

The PROVEDYE™ dilution and volume to be administered depends on the destination and size of the area to be coloured. PROVEDYE™ could be diluted until 0.01%.

PROVEDYE™ may be placed in contact with the anatomic structure after dilution.

PROVEDYE™ can also be injected in the light of certain organs, or placed in contact with the epithelium of the organ via the existing natural orifices.

PROVEDYE™ can also be administered orally after dilution.

## **Adverse effects**

- Gastrointestinal: nausea, vomiting, diarrhea, abdominal pain, blue colour of faeces and saliva.
- Hematology: 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 discolouration, urticaria.
- Nervous system: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- Injection 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 fluid infusion), necrosis (if extravasation occurs).

# Previous Version Product Information

- Renal: blue color of the urine.
- Respiratory, thoracic and mediastinal disorders: dyspnea, tachypnea, hypoxia.
- Ophthalmology: eye 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.

## Warnings

Do not inject PROVEDYE™ intravenously, subcutaneously, intrathecally and intra-amniotically. Do not use PROVEDYE™ if the solution is colourless;

Do not use a damaged ampoule of PROVEDYE™ . PROVEDYE™ is for single use only: discard any remaining solution after opening.

PROVEDYE™ should be disposed of in clinical waste.

In case of re-use of PROVEDYE™ , there is a risk of decrease of technical performance such as contamination.

Follow the risk management plan for the operative theatre.

Keep out of reach of children.

## Precautions for use

PROVEDYE™ must be used by a healthcare professional.

The wearing of gloves is recommended for users. PROVEDYE™ must be used immediately after

opening or dilution.

## Storage

Do not refrigerate PROVEDYE™ under 8°C or freeze.

Keep the ampoule in the original packaging to protect it from light.

## Packaging:

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

## Publication date:

Last revision: 10 2014



ProVepharm S.A.S. 22 Rue Marc Donadille 13013  
Marseille, France [www.provepharm.com](http://www.provepharm.com)

## SPECIAL PRECAUTIONS FOR USE (to be kept in the operating theatre)

### PROVEDYE™ 0.5% 2ml – Sterile solution

Preparation for local administration

Do not inject PROVEDYE™ in an intravenous, subcutaneous, intrathecal or intra-amniotic injection. PROVEDYE™ may be diluted in water (for oral use only) or in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

PROVEDYE™ could be diluted until 0.01%.

Additional information on the way in which PROVEDYE™ can be administered is provided in the instructions for use.

Use immediately after opening. Any unused product or waste should be disposed of in accordance with local requirements.





0.5%

**Composition:**

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

**Indications:**

Visualization aid for surgical procedures such as the delineation of tissues and operative pieces, Seal test for sutures, detection of leaks, fistula detection.

**Contraindications**

Do not administrate PROVEDYE®:

- In case of known hypersensitivity to the methylene blue or to any other thiazine dyes;
- In case of treatment with Selective serotonin reuptake inhibitors (SSRIs), bupropion, buspirone, clomipramine, mirtazapine and venlafaxine;
- In case of Pregnancy or breastfeeding PROVEDYE® should be avoided;
- In case of Glucose-6-Phosphate Dehydrogenase deficiency.

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

**Method of administration and dosage**

A preoperative assessment is recommended before using PROVEDYE®. PROVEDYE® water (for oral use only). PROVEDYE® may be diluted in sodium chloride (NaCl) 0.9% solution and must be used immediately after dilution.

The PROVEDYE® dilution and volume to be administrated depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted until 0.01%. PROVEDYE® may be placed in contact with the anatomic structure after dilution. PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the epithelium of the organ via the existing natural orifices. PROVEDYE® can also be administered orally after dilution .

**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, urticarial.

- Nervous system: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- Injection 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. Eye: 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.

**Warnings**

- Do not inject Provedye® intravenously, subcutaneously, intrathecally and intra-amniotically
- Do not use Provedye® if the solution is colourless;
- Do not use a damaged ampoule of Provedye®;
- Provedye® is for single use only: discard any remaining solution after opening;
- In case of re-use of Provedye®, there is a risk of decrease of technical performance such as contamination
- Provedye® should be disposed of in clinical waste.
- Follow the Risk management Plan for operative theatre;
- Keep out of reach of children.

**Precautions**

- PROVEDYE® must be used by a healthcare professional.
- The wearing of gloves is recommended for users.
- PROVEDYE® must be used immediately after opening or dilution

**Storage**

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

**Conditioning:**

2ml ampoules, in packs of 5 or 20 ampoules

**Publication date**

*Last revision: 10-2014*



8°C



STERILIZE



Provepharm S.A.S ; 22 Rue Marc Donadille 13013 Marseille, France [www.provepharm.com](http://www.provepharm.com)

**SPECIAL PRECAUTIONS FOR USE (to keep in the operative theatre)****PROVEDYE® 0.5% 2ml – Sterile solution**

Preparation for Local administration.

Do not inject PROVEDYE® in Intravenous, subcutaneous, intrathecal and intra-amniotic injection

PROVEDYE® may be diluted water (for oral use only).

PROVEDYE® may be diluted in sodium chloride (NaCl) 0,9% solution and must be used immediately after dilution.

PROVEDYE® could be diluted until 0.01%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.



0086



# Previous Version Product Information



## Composition:

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

## Indications:

Visualization aid for surgical procedures such as the delineation of tissues and operative pieces, Seal test for sutures, detection of leaks, fistula detection.

## Contraindications

Do not administrate PROVEDYE®:

- In case of known hypersensitivity to the methylene blue or to any other thiazine dyes;
- In case of treatment with Selective serotonin reuptake inhibitors (SSRIs), bupropion, buspirone, clomipramine, mirtazapine and venlafaxine;
- In case of Pregnancy or breastfeeding PROVEDYE® should be avoided;
- In case of Glucose-6-Phosphate Dehydrogenase deficiency.

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

## Method of administration and dosage

A preoperative assessment is recommended before using PROVEDYE®. PROVEDYE® may be diluted in a Glucose 5% solution or in a sterile water solution. The PROVEDYE® dilution and volume to be administered depends on the destination and size of the area to be coloured. PROVEDYE® could be diluted between 0.01% and 0.5%. PROVEDYE® may be placed in contact with the anatomic structure after dilution. PROVEDYE® can also be injected in the light of certain organs, or placed in contact with the epithelium of the epithelium of the organ via the existing natural orifices. PROVEDYE® can also be administered orally after dilution.

## 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, urticarial.

- Nervous system: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- Injection 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. Eye: 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.

## Warnings

- Do not inject Provedye® intravenously, subcutaneously, intrathecally and intra-amniotically
- Do not use Provedye® if the solution is colourless;
- Do not use a damaged ampoule of Provedye®;
- Provedye® is for single use only: discard any remaining solution after opening;
- In case of re-use of Provedye®, there is a risk of decrease of technical performance such as contamination
- Provedye® should be disposed of in clinical waste.

•Follow the Risk management Plan for operative theatre;

•Keep out of reach of children.

## Precautions

- PROVEDYE® must be used by a healthcare professional.
- The wearing of gloves is recommended for users.
- PROVEDYE® must be used immediately after opening or dilution
- PROVEDYE® should not be diluted with sodium chloride Solution (NaCl).

## Storage

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

## Conditioning:

2ml ampoules, in packs of 5 or 20 ampoules

## Publication date

Last revision: 09-2014



Provepharm<sup>TM</sup>  
PROVENCE TECHNOLOGIES GROUP

Provepharm S.A.S; 22 Rue Marc Donadille 13013  
Marseille, France [www.provepharm.com](http://www.provepharm.com)

## SPECIAL PRECAUTIONS FOR USE (to keep in the operative theatre)

### PROVEDYE® 0.5% 2ml – Sterile solution

Preparation for Local administration.

Do not inject PROVEDYE® in Intravenous, subcutaneous, intrathecal and intra-amniotic injection

PROVEDYE® may be diluted in 50 ml glucose 50 mg/ml (5%) solution or in a sterile water solution for injection.

PROVEDYE® must not be diluted with sodium chloride (NaCl) solution for injection because it has been demonstrated that chloride reduces the solubility of Methylene Blue 0.5%. PROVEDYE® could be diluted between 0.01% and 0.5%.

Additional information on the way in which PROVEDYE® can be administered is provided in the Instructions for use.

Use immediately after opening. Any unused product or waste material should be disposed of in accordance with local requirements.





0.5%

## Previous Version Product Information

### Mode of administration and dosage

A preoperative assessment is recommended before using PROVEDYE®.

PROVEDYE® may be diluted in Glucose 5% solution for injection or sterile water solution.

The dilution of PROVEDYE® and the volume to administrate depend of the staining destination and the size of the zone to stain.

PROVEDYE® may be deposited in contact with the anatomic structure after dilution.

PROVEDYE® can also be injected in the light of some organs, or put in contact with the epithelium of the organ through natural existing orifice.

PROVEDYE® can also be administered orally after dilution.

### Side 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, urticarial.
- Nervous system: headaches, dizziness, mental confusion, anxiety, tremor, fever, aphasia, agitation.
- Injection 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. Eye: 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.

### Warnings

Do not inject PROVEDYE® in Intravenous, subcutaneous, intrathecal and intra-amniotic injection

Do not use PROVEDYE® if the solution is colourless;

Do not use a damaged ampoule of PROVEDYE®.

PROVEDYE® is for single use only: Throw any remaining solution after opening.

PROVEDYE® should be eliminated through hospital waste.

Follow the Risk management Plan for operative room.

Keep out of the reach of children

### Precautions

PROVEDYE® must be used by a healthcare professional.

Gloves are recommended for users.

PROVEDYE® must be used immediately after opening or dilution

PROVEDYE® should not be diluted with NaCl Solution for injection.

### Storage

Do not refrigerate PROVEDYE® under 8°C or freeze.

Keep the ampoule in the original package in order to protect from light.

### Conditioning:

2ml ampoules, in packs of 5 or 20 ampoules

### Publication date

Last revision: 07-2014



0086 (MM YYYY)

STERILE A



8°C



**ProVepharm**  
PROVENCE TECHNOLOGIES GROUP

ProVepharm S.A.S ; 22 Rue Marc Donadille 13013 Marseille, France

[www.provepharm.com](http://www.provepharm.com)

SPECIAL PRECAUTIONS FOR USE (to keep in the operative theatre)

**PROVEDYE® 0.5% 2ml – Sterile solution**



Preparation for Local administration.

Do not inject PROVEDYE® in Intravenous, subcutaneous, intrathecal and intra-amniotic injection

PROVEDYE® may be diluted in 50 ml glucose 50 mg/ml (5%) solution for injection or water sterile solution.

PROVEDYE® must not be diluted with sodium chloride (NaCl) solution for injection because it has been demonstrated that chloride reduces the solubility of Methylene Blue 0.5%.

Additional information on how PROVEDYE® can be given is provided in the Instructions for use.

Use immediately on opening. Any unused product or waste material should be disposed of in accordance with local requirements.



0086 (MM YYYY)

STERILE A



**ProVepharm**  
PROVENCE TECHNOLOGIES GROUP