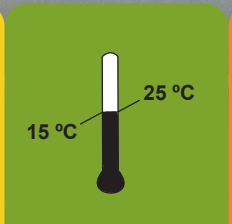
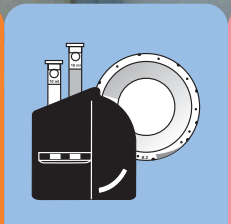
Lovibond® Water Testing

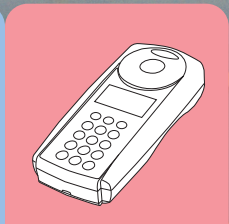
Tintometer® Group

Cutting Fluid Test Kit

56I701180







Cutting Fluid Test Kit

The cutting fluid test kit has been introduced due to the following:

- To protect the machinery operators, as within the United Kingdom under Section 2 of the Health & Safety at Work Act 1974, it is the duty of the employer to protect the employee as far as is reasonably practicable.
- To aid machinery operators when dosing and maintaining cutting fluids in order that they can monitor the condition of the cutting fluids.

The cutting fluid test kit offers full compliance and includes the following:

1. 10 x RBS Dual Media (TVC & Yeasts/Moulds) Dip Slides
2. 1 x pH meter and Calibration Solutions
3. 1 x pH Strips
4. 1 x Nitrite/Nitrate Test Strips
5. 1 x Refractometer

Note:

1. The SD50 pH meter will also measure temperature directly on the display.
2. Further instructions can be found with the corresponding product.

Dipslides

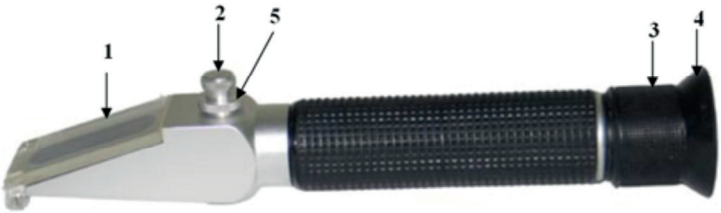
Our dipslides are designed to allow easy enumeration of aerobic bacteria, fungi, yeasts and moulds from fluids and surfaces.

Nutrient TTC agar is used for the general cultivation of aerobic organisms and allows for a total viable count (TVC) of a sample.

The RBS agar is selective for fungi, moulds and yeasts.

Glycol Refractometer

A refractometer can be used to measure glycol (antifreeze levels) in closed cooling systems. The instrument measures light refraction by glycol. The greater the concentration of glycol, the greater the refraction. A calibrated scale plate inside the unit gives a direct reading of both concentration (%) and protection level (oC) for both mono-propylene glycol and mono-ethylene glycol.



1-Daylight Plate 2-Calibration Screw 3-Focus Adjustment 4-Eyepiece
5-Calibration Screw Block

1. Focus the refractometer by twisting the focus adjuster (numbered 3).
2. To calibrate open the daylight plate (numbered 1), place 2 - 3 drops of distilled water onto the plate and close. Wait for approximately 30 seconds and twist the calibration screw (numbered 2) until the light/dark boundary coincides with the zero line.
3. Using one of the pipettes supplied, obtain a sample of the fluid and place 2 - 3 drops on the daylight plate (numbered 1). Close the daylight plate and read the scale of the light/dark boundary. This measurement is the percentage of glycol and protection level.
4. After measurement, clean the surface of the plate and lid with a moist cotton cloth.

Total Count / Yeast & Moulds

D003 TTC/ Rose

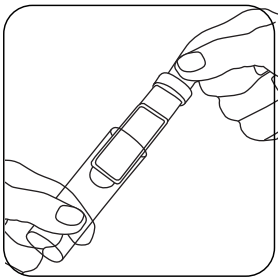
EN

The following accessories are required.

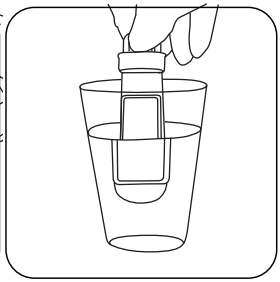
Accessories	Packaging Unit	Part Number
D003 TTC/RBS Dipslides (Rose Bengal) (pack of 10)	1 Pieces	56B010310

Remarks

1. A detailed instruction manual is enclosed with the product.
2. Please store in a cool and dry environment at 10 - 15 °C.
3. Large variation in temperature can lead to condensation forming inside the tube and can eventually lead to dehydration of the agar.
4. Sampling of surfaces:
   Bacterial recovery rate is about 50% so that sweeping an area approximately twice that of the paddle will give a more accurate result.

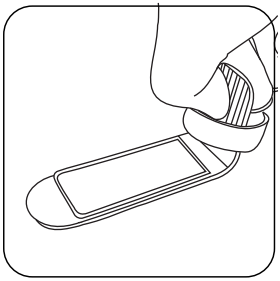


Remove the dip slide from the container by pulling the white tap while holding on to the outer cover.

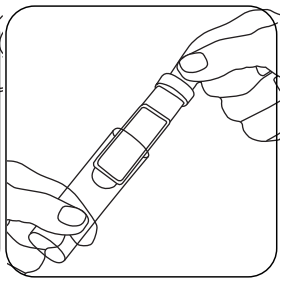


Sampling Fluids: The sample should be taken by immersing both sides of the paddle into the fluid to be tested.

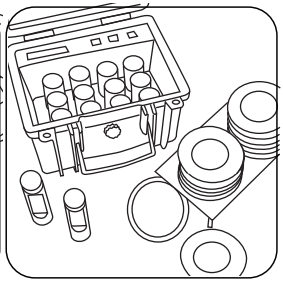
Excess sample should be gently shaken from the paddle before it is replaced in the container.



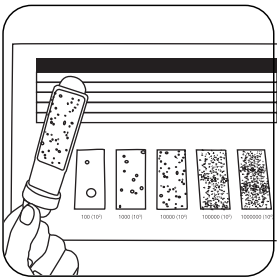
Sampling Surfaces: The sample should be taken by allowing direct contact between the agar surface and the test material. The paddle is flexible and can be bent at the upper end to allow both surfaces to come into intimate contact.



Place the dipslide back into the container while holding on the outer cover.



After sampling, the dipslides should be placed immediately into incubation at 30 - 35 °C for 24 - 48 hours. For fungi and moulds incubate for up to 5 days.



EN

After incubation compare result of the dipslide to the dipslide comparison chart to quantify the result. For documentation and evaluation, you can also use our "Diplside Comparator 2" App.

Glycol

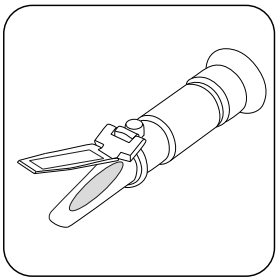
% PEG/MEG

Glycol/ Refractometer

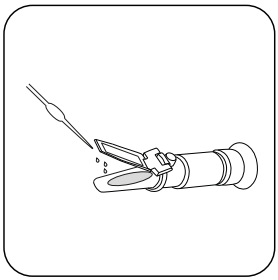
EN

Remarks

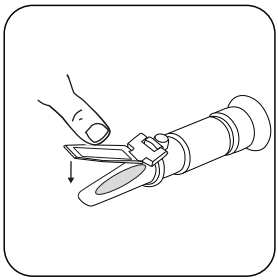
1. The description of the calibration is described in the detailed operating instructions. A detailed instruction manual is enclosed with the device.
2. Point the front end of the refractometer towards a bright light source when you want to take a reading.
3. After the measurement, wipe the measuring solution on the surface of the prism and the cover plate with a damp cotton cloth. Never immerse the device in water or hold it under running water as water may enter the device.
4. After drying, the refractometer should be stored safely. The refractometer is an optical measuring instrument and therefore very sensitive. Please handle it with care. Do not touch or scratch the optical surfaces. The refractometer should be stored in a dry, clean environment to prevent moisture and dust. Please avoid strong shaking.



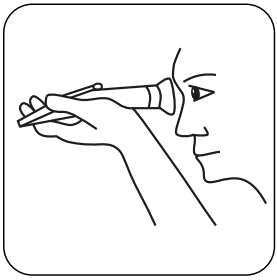
Lift the prism cover.



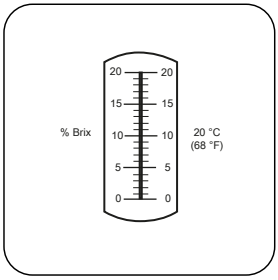
Place a few drops of the sample on the prism face.



Close the daylight plate and press it lightly.



Look through the eyepiece at the measuring scale.



Read the result at scale of light/dark boundary.

Nitrate/Nitrite

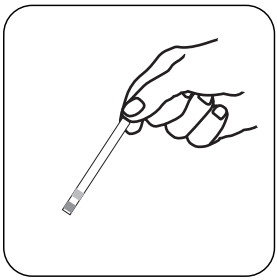
1 - 80 mg/L NO_2^-

Strips Nitrate/ Nitrite

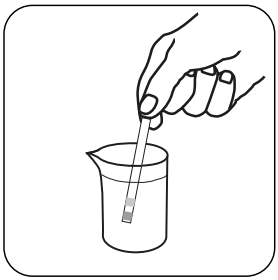
EN

Remarks

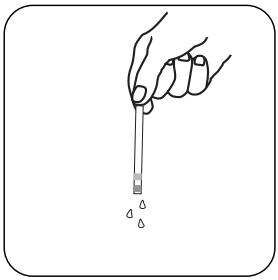
1. When handling test strips, make sure to touch them with your fingers only at the end of the test strip. The pads must not come into contact with the fingers.
2. The test strips must be stored in the closed packaging.
3. Store in cool, dry place and away from direct sunlight (4-30 °C).
4. Interference (nitrate):
   If the nitrite test field turns red-violet, the nitrate detection is disturbed. To eliminate the nitrite interference, add 1 measuring spoon of amidosulphuric acid (REF 918973) to 10 mL of the sample to be tested, shake again and repeat the test after two minutes. In this way 10 mg/L nitrate can still be detected next to 1000 mg/L nitrite.
5. Interferences (nitrite):
   Strongly acidic solutions (pH < 1) must be buffered with sodium acetate, alkaline solutions must be adjusted to about pH 3-5 with citric acid. The following ions interfere only in larger concentrations: > 1000 mg/L Br^-, BrO_3^-, Cl^-, ClO_4^-, F^-, I^-, $Mo_7O_{24}^{6-}$, NO_3^-, OCN^-, PO_4^{3-}, SO_3^{2-}, SO_4^{2-}, SeO_3^{2-}, WO_4^{2-}, acetate, Oxalate, Tartrate, Citrate, Succinate, Ag^+, Al^{3+}, As^{3+}, Ba^{2+}, Be^{2+}, Co^{2+}, Cd^{2+}, Cr^{3+}, Cu^{2+}, Hg^{2+}, K^+, Li^+, Mg^{2+}, Mn^{2+}, Na^+, Ni^{2+}, Pb^{2+}, Sb^{3+}, Tl^+, Zn^{2+}, > 250 mg/L SO^{2-}, SO^{2-}, > 100 mg/L $[Fe(CN)6]^{4-}$, SO^{2-}, SCN^-, Ascorbate.



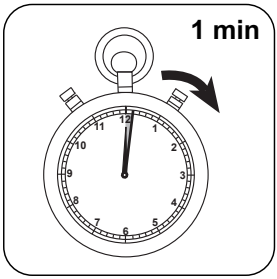
Remove one test strip. Hold the end of the test strip between index finger and thumb.



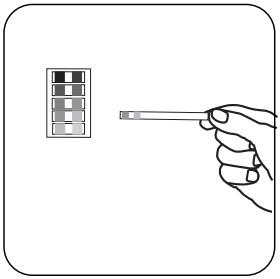
Dip the test strip into the solution to be tested so that all pads are completely immersed. (1 second)



Shake off excess liquid.



Wait for **1 minute(s) reaction time**.



Read the result from the colour scale. (If nitrate ions are present, the outer test paper (at the end of the stick) turns reddish purple. The test field above (towards the end of the handle) shows the nitrite concentration.)

pH Strips pH 7-14

7 - 14 pH

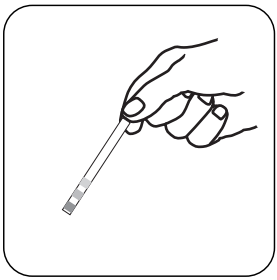
EN

Material

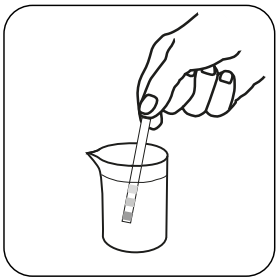
Reagents	Packaging Unit	Part Number
pH Strips pH 7-14 Plastic	1 Pieces	56S001190

Remarks

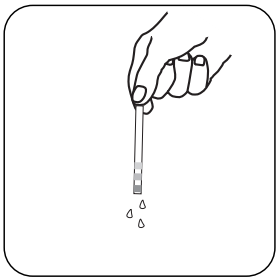
1. When handling test strips, make sure to touch them with your fingers only at the end of the test strip. The pads must not come into contact with the fingers.
2. The test strips must be stored in the closed packaging.



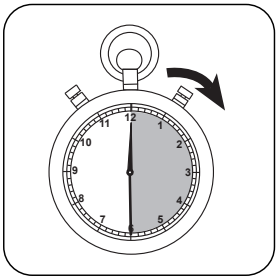
Remove one test strip. Hold the end of the test strip between index finger and thumb.



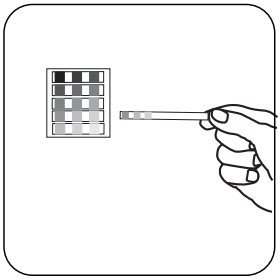
Dip the test strip into the solution to be tested so that all pads are completely immersed.



Shake off excess liquid.



Compare the colour of the test strip within 30 seconds with the colour chart provided.



Read the result from the colour scale.

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