

# Micron Kit + Worm User Guide





# Welcome to the future of animal health!



This guide contains everything you need to know to perform a rapid worm test with Micron Kit.



Manufactured in the UK. By using the Micron Kit and Services, you agree to the Terms and Conditions of Micron Kit which can be found at https://micronagritech.com/terms-and-conditions/

> For queries related to Micron Kit, email support@micronagritech.com

Micron Agritech, Greenway Hub, Grangegorman Lower Dublin 7, Ireland

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### **Micron Kit Contents.**

Micron Kit contains everything you need to test animals for GI worms. All you need is your Kit, a smartphone and our mobile app to process results.



#### **Intended Use**

Micron Kit is intended for use in veterinary practices and laboratory environments. It is not intended for use in domestic environments. The Kit is intended to be used by trained staff to check the presence of GI nematodes in animal faecal samples. The system is not suitable for any other use. If the equipment is used in a way not intended by the manufacturer, then the protection provided by the equipment may be impaired. Micron Agritech cannot accept any responsibility for the consequences of improper use. Before using the Kit, carefully read and follow the instructions and keep the manual close to the Micron Kit. This Kit is intended to be used by veterinary staff or specially trained personnel, to run parasite testing on animals faecal matter. This Kit should only be used once the users have completed training provided by Micron Agritech. Keep this manual close to the Micron Kit and ensure it is reviewed by each user of the Kit.



# Setting Up the App.

# Step 1 Download Micron Kit App



## -Step 3

#### **Tutorials**

Video tutorials demonstrating the Micron Kit in use can be found on the Micron Kit app.

The app will provide the option to review the instructions or instructional videos before beginning the test.

## **Phone Requirements**

#### Minimum system (phone) requirements for Micron Kit.

Animal testing through Micron Kit uses your phone for sample recording and analysis. For the best user experience we recommend you use a phone with the following specifications. Note these specifications may change as the app gets updates and additional features are added.

#### **Supported Platforms**



## Minimum hardware requirements for iOS (Apple) devices



## Minimum hardware requirements for Android devices



#### Minimum network (internet connection) requirements

A stable internet connection with a minimum upload speed of 5MBPS. Note some devices may not be compatible with the Micron Kit, you can check whether your device is compatible by contacting our support team by emailing support@micronagritech.com or using the live chat function in your app.

## Sample Collection Tips

Fresh samples must be collected from the rectum by a trained professional only or from fresh dung droppings found. This sample can be taken from individual animals or pooled from a representative number of animals in the herd/flock.

## When collecting a sample take care to ensure the following:



Faecal samples should be tested within 2 days. The longer the wait before testing a sample, the less likely the parasite eggs will be detected in the test. Samples can be stored in a refrigerator for up to 5 days.



Dung pats with evidence of burrowing beetles should be avoided as they may not be fresh enough.



It is advisable to scrape away any crust from a fresh pat and take the sample from a more liquid portion.

#### Pooling Samples

- For pooled samples it is advised to collect from a larger number of dung samples (approx. 15) to achieve a representative sample. When using 15 samples, the chances of having samples from 10 individual animals is much greater than when sampling only 10. It is important to note that repeat sampling of the same pasture will likely yield different results because of the different individual animals that contributed to the pool.
- Always ask your client to bring in the samples individually so that you can pool them in-house, and ensure you are using equal quantities.
- Pooled samples should consist of an equal amount from each sample.
- For pooled sheep dropping samples, 3-4 pellets per dung pile are advised.

#### **Understanding Worm FECs**

A faecal egg count (FEC) counts the number of different worm eggs and oocysts detected in a faecal/dung sample from an animal. These results are interpreted as eggs per gram (EPG). The number of eggs detected is an indication for the number for adult worms present in the gut of that animal.

#### Worm FECs can be used to:

- Help to determine if treatment is needed.
- Test the efficacy of a treatment by testing for resistance.
- Give information on the amount of contamination going onto pasture.

Disposal of faecal samples is the responsibility of the user. Please follow guidelines recommended by your local authorities.



# How to Prepare a Sample?



## **Preparing a Sample for Analysis**



Using the spatula provided, mix the sample thoroughly to evenly distribute any potential parasite eggs. Using the bottle provided, add regular tap water to one of the empty containers (provided with the Kit) up to the lower black line.

#### Note:

When measuring the water level, the container should be on a flat, level surface. Always read from the bottom of the meniscus, looking at the black line at eye level.

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Measure out 3g of the sample into the container of water so that the water level reaches the second black line.

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Mix the water and faecal sample and ensure that there are no clumps of material. If the faeces is very dry, use the spatula to break up the sample. Shake the sample several times until it is uniformly mixed.

Attach the filter onto another clean container and pour the entire sample through the filter into this new container. Use the spatula to squeeze extra liquid through the filter. Replace the filter with the lid and gently invert 5 times.

#### Tip:

If you have the +Fluke add-on, you can use filter "1" and the beaker for this step.

Using the syringe or pipette provided, fill the two microtubes to 5 mL with the liquid from the container and close the lids tightly. Ensure you dry the outside of the microtubes before the next step. It may be useful to keep the left-over sample in the container in case the test needs to be repeated.

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Place the microtubes in the Micron Kit Centrifuge, ensuring they are securely held in place by the elastic string. (Do not proceed with the test if the elastic is loose).

Take a handle in each hand and gently pull apart the coiled rope. Pull gently in opposite directions to place tension on the coiled rope and then relax. Allow the handles to come closer together (but without touching) after each pull. Do this for 2 minutes (60 pulls). Do not use excessive force to spin the centrifuge. This can cause damage. A relaxed approach will help you find the right rhythm sooner and help reduce the risk of injury. We recommend wearing eye protection. *This step may also be completed using an electronic centrifuge set to 1,500 RPM for 5 minutes*.

Tip:

When you can hear the hum of the Centrifuge disc spinning, the appropriate speed has been reached and there is no need to attempt to speed this up.

#### Note:

If using the electronic centrifuge, set the RPM to 1500. Set the timer to 5 minutes. Use the 15 mL vials provided. Fill the sample up to the 10 mL line. When centrifuging you must always ensure the centrifuge is balanced. You can do this by placing a second sample in the opposite position in the centrifuge, or alternatively, fill a vial to 10 mL with water and place in the opposite position to your vial.

After centrifuging, a small 'pellet' should have formed at the bottom of each microtube/vial. Carefully discard the liquid/supernatant in each microtube/vial, ensuring that the pellet is not disturbed during the process.

Each microtube should be filled back up to the 5 mL line with the Worm FEC Solution.

#### Note:

If using the electronic centrifuge, fill the vial back up to 10 mL with the Worm FEC Solution.

#### Note:

Only add the Worm FEC Solution to the pellet once you are ready to test. Prolonged exposure of the eggs to Worm FEC Solution may cause egg deformation or membrane rupture. We recommend to complete tests within 20 minutes of adding the Worm FEC Solution.



Combine the contents of both microtubes into a clean container, using the syringe/pipette. Place the lid onto the container and gently invert it 5 times to ensure the sample has been mixed. To invert, gently turn the container upside-down and back again. *Do this gently to ensure you are not adding bubbles.* 

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Immediately after inverting the container, use the 5 mL syringe to collect the sample from the container and inject it slowly into the intake port of the slide. Slightly tilt the slide and inject into the lower port to help avoid large air bubbles. (It can be helpful to place the spatula under the air vent end of the Worm FEC Slide to get the correct angle.) Make sure the slide is completely filled with liquid and there are no visible air bubbles. To ensure an accurate test, it is important not to leave the sample sitting for more than a few seconds in the container or in the syringe before filling the slide.



Once the slide is filled, lock the air vent using the Slide Locks provided and wipe the slide dry using a paper towel. Allow the slide to rest for at least 2 minutes to allow eggs to float to the top.

## Analysing a sample for Worm FEC



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Identify which camera your phone uses for videos and align the camera on your phone with the hole in the middle of the adhesive pad so that there is no obstruction visible on the screen. If you flip the attachment over, you should be able to see your entire camera lens through the hole.

#### 08

Once aligned correctly, place the phone and attachment onto the Reader. The phone must be oriented on the right side of the Reader, with the button facing towards you as shown below.

**09** Single press the power button to start the motor.

#### 10

Gently pick up and insert the slide into the left-hand side of the reader, taking care not to disturb the liquid inside.

#### 11

As soon as the slide begins to move, start the recording in the app to capture a video of the slide.

NOTE: The video must include the coloured bars at the start and end of the slide.

Further details on using the Reader can be found in the "Reader" section on page 18. If there are any queries, do not hesitate to contact customer support or revise the instructional videos found in the Micron Kit app.

## **Quality Control**

#### Ensuring a rapid result

Quality control and troubleshooting.

To ensure an accurate, rapid result, each sample should be prepared carefully following the instructions provided. This ensures high quality data is generated and accurate identification of eggs. You can ensure the test you are submitting receives a rapid, high quality result by comparing what you see against our handy quality checking guide.



#### Tips

Clean phone camera and reader lens (using microfibre cloth) before attaching phone. Allow the slide to rest before inserting into the reader.

# Water droplets.







#### Tips

Wipe drops of liquid away from the Worm FEC Slide. Visually inspect the surface and ensure it is dry.

#### Tips

Gently swirl sample or push and pull the syringe plunger repeatedly to mix slowly, taking care not to create any bubbles in the sample.

#### Don't

Shake sample.

#### Tips

Begin test when you can see a full circle lit up in view.

#### Tips

Only add the recommended amount of faeces. Do not exceed above the upper measuring line on the pot. Use the correct amount of FEC Worm Solution.



Reader

## Micron Kit Reader



1. Attachment for Phone3. Phone5. Green Light7. Red Light9. Reset Button2. Sticky Pad4. Worm Slide6. Yellow Light8. Power Button10. Charging Port

#### Quick guide.

User Input	What Happens	LED Indicators						
Long press power button for 3 seconds.	Reader turns on/off.	Steady Green (when on)	$\bigcirc$					
Single press power button when on.	Enters "Test Mode". Motor runs to pull slide through Reader.	Flashing Green	-\-					
Single press power button during "Test Mode" or "Quick Eject".	Stops motor running. Returns to "Ready to Use" state.	Steady Green	$\bigcirc$					
Double press power button at any time.	Cancels test. Motor runs at full speed to quick eject slide.	Green & Red Alternating Flash						
Low Battery.	Reader works as normal. Must be charged as soon as possible.	Flashing Red						
Critically Low Battery.	Reader will turn off shortly. Do not start test. Charge immediately.	Rapidly Flashing Red						
Connect Reader to charger via USB-C port.	Reader will start charging.	Steady Yellow (Full Charge: Off)	$\bigcirc$					
	Charging problem is detected.	Flashing Yellow						
	Invalid charger is detected.	Steady Red						

## **Using the Reader**

- Press and hold the power button to power on/off the Reader.
- Before starting a test, if your phone has multiple cameras, identify which camera on the phone is used for videos.\* Using a microfibre cloth, wipe the Reader lens and phone camera lens to remove any dust or fingerprints. Align the phone camera with the attachment so that the camera view is unobstructed. Secure the phone on the sticky pad in the orientation shown on page 8 (diagram B) ensuring the phone is not lifting at the corners. Place the attachment and phone back on the Reader. The attachment lid and the phone should both be to the right of the device as you are looking at the button on the Reader. When the camera of the phone is correctly aligned, a circle of white light should be visible on the phone screen when the Reader is turned on. If a crescent of yellow or darker light is visible on the side of the circle, the phone may be lifting on one side or incorrectly aligned. If not corrected, the test may have to be repeated as it could lead to an inaccurate egg count.
- Single press the power button to start the internal motor running.
- When the sample filled slide has rested for 2 minutes, slowly and carefully insert the slide (with Slide Lock) into the left-hand side of the Reader until the motor catches the slide and pulls it through the Reader. \*\*
- >> Once the slide has fully passed through and has stopped moving, carefully remove the slide from the right-hand side of the Reader. Rinse slides immediately after each use.
- $\ensuremath{\gg}$  Single press the power button to pause the motor between tests should you wish to do so.
- >> To cancel a test, press the power button. This will run the motor at full speed to eject the slide from the Reader. If the slide is finished passing through the Reader, press the button once to return to the "Ready to Use" state. Once the green and red lights have stopped flashing and the green light is on steady, a new slide can be inserted for a new test.
- $\,\gg\,$  To charge the Reader, connect the USB-C cable to the back of the Reader, using the charger provided.

\*To identify which camera is used for video fill in the relevant information in the Micron Kit app and press "New Test". The app has a section to allow time for aligning the phone before recording a test. Using the live camera feed on screen, move a finger from one camera to another on the back of the phone. The finger should only be visible in front of one camera. This is the camera that will be used for the test and must be aligned with the hole on the phone attachment. Wipe any fingerprints from the lens before testing.

\*\* This symbol on the Reader marks the correct slot and orientation to insert slide. This symbol

#### **General Maintenance**

- The Reader must be stored and used at room temperature.
- Ensure the protective film on the sticky pad is removed before first use.
  - Should the sticky pad on the attachment become dirty and less sticky over time, the attachment can be removed from the Reader and hand washed in warm water and liquid soap. The sticky pad will return to its original stickiness once air dried. Allow the attachment to fully dry before putting it back onto the Reader.
- Wipe down the outside of the Reader with antibacterial wipes to clean.
- Wipe the Reader lens and the phone camera lens with a microfibre cloth before each use. Dust, fingerprints or dirt may effect accuracy of results.
- The charging port is located at the back of the Reader as displayed on page 18.

#### Warning!

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- Beware of pinch point hazard at slide entry and exit. Always remain alert and be careful of fingers when inserting or removing a slide. Do not introduce any foreign objects, liquids, or fingers inside the slide track of the Reader other than the slides provided with Micron Kit as this could result in injury or damage the mechanism inside the Reader.
- Always use the Reader on a steady, level surface.
- Never lift, tilt, or move the Reader in any way when a slide is inside the device.
- Never leave a slide in the Reader after use.
- Do not use the Reader on low battery for extended periods of time. Should the Reader run out of battery while in use, a slide may become stuck in the reader. If this does happen, charge the reader as soon as possible, power on the device, and eject the slide.
- Do not introduce any foreign objects, liquids, or fingers inside the charging port of the Reader.
- Never submerge the reader in water to clean it.
- If moving the reader between rooms with a significant temperature difference, allow 10 minutes for the Reader to adjust to the new temperature. Sudden changes of temperature may cause condensation inside the device preventing it from performing correctly.
- Always use the charging cable provided with the Micron Kit.
- The internal battery is not designed to be end user replaceable.
- Do not use the Reader in rainy, wet, or extreme weather conditions.
- If there is a problem with the Reader, do not attempt to fix it alone. Please contact support for advice.

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## **Using the Worm FEC Slide**

Fill the slide slowly with a test sample using a syringe or pipette. Be careful to avoid large air bubbles. Should a large air bubble occur, empty the sample and refill the Worm FEC Slide. Ensure the air vent is unobstructed when filling the Worm FEC Slide. The Worm FEC Slide will not fill correctly if this hole is covered or a Slide Lock is inserted. If it is difficult to fill the Worm FEC Slide without air bubbles, try to gently tilt the air vent end of the Worm FEC Slide slightly up and inject into the lower intake port. The spatula can be placed under the air vent end of the Worm FEC Slide to achieve the correct angle. This should help to avoid large air bubbles. Refer to the instructional videos in the app to see this method being used.

Once the slide is filled, insert one of the Slide Lock provided into the air vent to help prevent spillages. Should the Slide Lock not be inserted, it increases the risk of spillages inside the Reader which may negatively impact the performance of the internal components.

Before inserting the filled Worm FEC Slide into the Reader, wipe down the Worm FEC Slide and ensure that the outer surfaces of the slide are dry. Pay particular attention that the top of the Worm FEC Slide is not wet, as you may have to repeat the test if a correct count cannot be obtained. Leave the filled slide to rest for at least 2 minutes to allow eggs to float to the top before starting the analysis.



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Insert the slide into the left-hand side of the Reader as shown in the diagram B on page 8. When inserting the Worm FEC Slide, the Worm FEC Slide teeth should be pointed away from the user. The end with the air vent should have a Slide Lock inserted first. Do this gently and carefully to avoid disturbing or spilling the sample. Be careful to avoid fingers being pinched when inserting the slide.



Once the test has finished running and the Worm FEC Slide has stopped moving, carefully remove the Worm FEC Slide from the Reader. Remove the Slide Lock and discard the sample.



## **General Maintenence**

- Never wash out the Worm FEC Slide using a harsh chemical. We recommend rinsing the slide with water or to leave to soak in water post rinsing, if a deeper clean is necessary. Please contact support@micronagritech.com if you are having any issues with the slide.
- Rinse the Worm FEC Slide immediately after use.

#### Note:

Samples and waste left to dry inside the slide could potentially make the slide unusable for future tests.

- To wash the inside of the Worm FEC Slide, pump lukewarm water (max 30°C) through the sample intake hole using a syringe/pipette or hold under a running tap until all visible debris has been rinsed out. If debris still remains, add more lukewarm water and leave to soak overnight to soften the adhered debris.
- Ensure there is no Worm FEC Solution or dirt left on the slide teeth as this could damage the internal components of the Reader.
- >> Tap any remaining water out of the slide and air dry after washing.

#### Note:

It is imperative that no water remains in the slide when adding a sample. This will reduce the specific gravity of the Worm FEC Solution and increase the chance of a false negative.

- Wash the slide plug in lukewarm (less than 40°C) water between uses.
- $\,\gg\,$  If the Slide Lock tears, breaks, or is no longer sealing the Worm FEC Slide, replace it with another Slide Lock.

#### Important

- Do not use the Worm FEC Slide if the acrylic is visibly cracked or the Worm FEC Slide is leaking.
- Never leave a Worm FEC Slide in the reader after use.
- Do not pull or push the slide while it is moving through the Reader during a test.
- Always use the Slide Lock provided. Failure to insert the slide plug into the Worm FEC Slide before testing could lead to internal spillages in the Reader which may cause damage to the Reader components or prevent the internal components from performing correctly.
- Once Worm FEC solution has been added to a sample, the test becomes time sensitive. For accurate results the Worm FEC Slide must be inserted into the Reader for testing within 20 minutes of adding Worm FEC Solution.
- It is recommended to use gloves when handling a Worm FEC Solution filled with a sample.
- Slide Locks may cause choking hazard.
- Do not wash the Worm FEC Slide in boiling water.



# Centrifuge

## **Using the Micron Kit Centrifuge**



Dry any excess moisture from the outside of the microtubes and check that the caps are tightly closed before putting the microtubes in the centrifuge.



When using the centrifuge, you must fill up 2 microtubes to 5 mL and secure both of them in the disc with the microtube elastic sting. If both microtubes are not in place and filled, the centrifuge will not function properly.



Take a handle in each hand and pull apart the coiled rope. Gently pull in opposite directions to place tension on the coiled rope and then relax.



Allow the handles to come closer together after each pull, without coming close enough to touch the spinning disc.

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Repeat this gentle pulling and relaxing motion for 2 minutes (60 pulls). Do not use any excessive force to spin the centrifuge. A relaxed approach will help to find the rhythm sooner. As soon as you hear a hum it is fast enough and no more force is required.

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To stop the centrifuge disc from spinning, stop pulling on the handles and allow the disc to slow to a near stop before bringing the handles together above the disc. Do not use the handles to stop the disc as this could damage the centrifuge and/or microtubes.



1. Centrifuge Handles 2. Centrifuge Disc 3. Microtube Flastic String 4. Microtubes

### **General Maintenence**

Before spinning the centrifuge disc, ensure that both filled microtubes are securely placed in the disc and that the elastic strings around them are tight. If the elastic strings are loose, this can cause the microtubes to fall out when the centrifuge is spinning at high speeds. Wrap the elastic string around the microtube an extra time if needed.

It is highly recommended to inspect the microtube elastic string before every use and look for signs of wear. If the strings show any signs of wear, substitute them with original parts from the manufacturer.

Check the handles and centrifuge disc periodically to make sure that there are no signs of cracks or wear. If you detect something is wrong, please contact the Micron Agritech support team.

Should the coiled rope of the centrifuge become unwound, hold the handles and turn the centrifuge in one direction for 10 rotations to coil the rope. Then, pull the centrifuge handles apart and relax the tension letting the centrifuge spin in the other direction as you normally would when using the centrifuge. Continue pulling the handles apart and relaxing until the centrifuge spins easily and the string has been sufficiently coiled.

- Inspect the coiled centrifuge rope periodically for signs of wear or fraying.
- The centrifuge discs and handles can be wiped down with antibacterial wipes to disinfect.

#### Warning!

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 It is recommended to wear eye protection and protective clothing while using the centrifuge.

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- Do not use the manual centrifuge if you have a history of injuries.
- The centrifuge must be operated with both handles held level to each other and the disc spinning vertically. Do not spin the disc at an angle as this may cause the disc to shift closer to the lower handle.
- Always remain alert while using the centrifuge.
- Ensure there is plenty of open space away from other people when using the centrifuge.
- Damaged centrifuge handles or strings may result in injury.
- Do not allow hands to touch the centrifuge disc while spinning.
- Do not stick hands, fingers, or objects in the gaps of the centrifuge disc or in the path of the centrifuge disc while spinning as this may result in injury.
- Centrifuge rope may become hot if using for extended periods of time.

## **Caution!**

Centrifuges are dangerous because they use a high-speed rotating body. Safety precautions are to prevent personal injury, and product damage from possible dangers during use. Please observe all safety measures described in this manual.

- >> Dry any excess moisture from the outside of the microtubes and check that the caps are tightly closed before putting the microtubes in the centrifuge.
- Use only the recommended parts and accessories provided by Micron Agritech Ltd. We are not responsible for any damage to the equipment or accidents resulting from the use of non-recommended parts and accessories.
- The sample must be placed in a 5 mL microtube provided by Micron Agritech.
- Substances that can generate volatile or explosive vapours cannot be centrifuged.
- Before centrifugation, the sample must be balanced.
- > It is forbidden to touch the rotating disc.
- $\gg$  Avoid using excessive force when pulling the centrifuge handles to rotate the disc.
- Avoid colliding the rotating disc with the centrifuge handles as it may cause damage to the equipment.
- Never use a tool to remove the microtubes.
- When requesting repair, the user must remove contaminants in advance.
- Maintenance must be performed by a technician authorised by Micron Agritech Ltd.
- For product repair, contact support@micronagritech.com.



# Worm FEC Solution

## **Using The Worm FEC Solution**

The Worm FEC Solution is a saturated saline faecal flotation solution with a specific gravity of 1.20. This solution is used to float parasite eggs and separate them from debris to aid detection under a microscope.

#### Note:

Once this solution has been added to a sample, the test becomes time sensitive. Only add the Worm FEC Solution to the pellet once you are ready to test. Prolonged exposure of the eggs to Worm FEC Solution may cause egg deformation or membrane rupture. We recommend to complete tests within 20 minutes of adding the Worm FEC Solution.

#### Where to purchase Worm FEC Solution?

You can send an email to  ${\tt support}@{\tt micronagritech.com}$  to inquire about purchasing more Worm FEC Solution.

If you wish to purchase a third party solution with a different recipe, or if you choose to make saturated saline solution yourself, we cannot guarantee the accuracy of results.

#### Warning!

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- This solution is not safe to drink.
- Do not leave unattended near children or animals.



## Cleaning & Safety Procedures

## **Cleaning Components**

To avoid cross contamination, it is important that all kit components are thoroughly cleaned after each use.

- paper towel to dry.
  - Clean the containers and microtubes using warm soapy water and lay them on a

Tap out and discard any faecal matter left in the filter after use. Clean the spatula  $\gg$ and filter in warm soapy water ensuring that there is no faecal matter caught in the filter mesh.

To clean the Worm FEC Slide, pump water through the sample intake port using a syringe/pipette or hold under a running tap allowing the water to exit through  $\gg$ the air vent. Do not use boiling water, soap or harsh chemicals to clean the slide. Take care that all visible debris has been rinsed out and the teeth of the slide are clean. Tap the water out of the slide and allow it to dry.

Use antibacterial surface wipes to wipe down the Reader, the phone, and the work  $\gg$ surface.

To clean the sticky pad, remove the phone attachment from the Reader and wash with warm water and liquid (not hard) soap, gently rubbing the sticky pad surface with your hands. Allow the sticky pad to air dry under a running tap allowing the  $\gg$ water to exit through the air vent. Do not use boiling water or soap to clean the slide. Take care that all visible debris has been rinsed out and the teeth of the slide are clean. Tap the water out of the slide and allow it to dry.

Rinse out the syringes with warm water and replace as needed under a running tap  $\gg$ with the plunger removed, allowing the water to exit through the intake hole.

#### Troubleshooting

Should issues be encountered while using the Micron Kit, please see the relevant component section in this booklet to help with any queries. For more troubleshooting information please visit the frequently asked questions section of our website at micronagritech.com/fag

Otherwise you can contact us by email at support@micronagritech.com or use our live messaging support service in the app or on the website.

## **Safety Procedures**

#### For Your Safety

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Working with animal faecal samples is a biohazard, and precautions must be followed to ensure safety for the user while conducting the test.

- $\gg$ Read the instructions provided thoroughly before use.
- Do not perform this test in a living, eating or food preparation area.
- Gloves and eye protection should be worn at all times. Protective clothing should also  $\gg$ be worn.
- Disinfect any surface that faecal matter may come into contact with.
- To avoid cross contamination, it is very important to thoroughly clean all of the components within the Kit after each use. Clean all of the containers and microtubes using warm soapy water and leave on a paper towel to dry.
- The internal battery is not designed to be end user replaceable.
- This product is not recomended for use in extreme weather conditions.
  - This Kit contains a faecal egg count solution that is not safe to drink.
- Do not leave Micron Kit unattended near children or animals. Slide Locks may cause  $\gg$ choking hazard.

Beware of pinch point hazard at the slide entry and exit of the Reader. Always remain alert and be careful of fingers when inserting or removing a slide. Do not introduce any foreign objects, liquids, or fingers inside the slide track of the Reader other than the slide(s) provided with Micron Kit as this could result in injury.

Take care to avoid injury when using the manual centrifuge. Do not use the manual centrifuge if you have a history of injuries. Only a gentle pull is required to operate it.

#### **Technical Data**

#### Key Features of the Micron Kit Reader

- Rapid parasite diagnostics Fully portable Works in conjunction with the Micron Kit app Battery powered

	Mechanical							
<b>Reader Dimensions:</b>	178.55 x 111.38 x 113.14mm							
Reader Weight:	0.85kg							
Reader Materials:	Aluminium, Polypropylene, Polycarbonate, Brass, Acrylic							
	Electronics							
Operational temp.:	5°C to 45°C							
Operational humidity:	45% to 85% RH							
Operating Voltage:	5V							
Battery:	1200mAh Li-ion prismatic cell							
Data/Charge Port:	USB-C							
Charger:	Input: 230 V, 50/60 Hz, 500 mA Output: 5V, 1.2 A							
	Optics							
Lens:	10x/0.25							
Eyepiece:	20x eyepiece lens							
[	Description of Symbols							
CE	The Reader has been assessed by the manufacturer and deemed to be compliant with the relevant EU legislation.							
UK CA	Marking indicates compliance with UK legislation.							
X	This product should not be discarded as unsorted waste. Must be sent to appropriate collection facilities for recovery and recycling.							
0	Recyclable cardboard packaging.							
î	Insert slide here / slide entrance.							
$\bowtie$	Do not insert slide here / slide exit.							
$\triangle$	General warning sign to draw attention to potential hazards. (For more detailed information see "For Your Safety" page 18)							

Y	our	' no	ote	s:																		
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#### Your notes: . . . • • . • • .

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#### Your notes:

Tour notes:																							
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This user guide contains everything needed to understand and run a Worm FEC test using Micron Kit +Worm. Read this user guide in its entirety before processing a test. Ensure to pay close attention to all notices and warnings for your safety and the safety of others.