

Instructions for Use

Introduction

This document describes the use of the product; **Phadebas DLA2® 1335** - Detection of Low Amylase Activity. The product is intended to be used for detection of very low levels of α -amylase activity specifically, in a variety of liquid samples, including opaque and colored ones.

Product Information

The Phadebas DLA2 package includes five dishes, each with seven prepared wells. The gel is buffered to pH 6, containing ions for optimal activity also including preservatives to prevent microbial growth.

Shelf Life and Storage

- Store the product in its original sealed zip bag and packaging at room temperature.
- The expiry date is printed on the outer label and on the dish.

Required Laboratory Equipment and Materials

(Not included in the package):

- Face covering and gloves
- 70% ethanol
- Pipette with clean tips
- Heating cabinet

Preparation Before Use

1. Always wear face covering and gloves when handling Phadebas DLA2.
2. Clean the working area with 70% ethanol before starting.
3. Use a clean pipette with a new tip for each sample to avoid false positives.
4. If samples are viscous or solid, dilute them with deionised water to create a liquid sample before applying.

Test Procedure for detection

1. Place the rubber band around the petri dish.
2. Pipette up to 175 μ l/175 mg of the test samples into separate wells and 175 μ l of deionised water as negative control.
3. Put the lid on after applying the sample.
4. Ensure that the rubber band fits tightly against the lid.
5. If necessary, make small adjustments to achieve a secure fit.
6. Incubate the dish at the temperature suitable for your specific α -amylase (up to

60°C) for the desired time (up to 7 days) in a heating cabinet.

Semi-Quantitative Determination

To estimate residual enzyme activity:

1. Prepare a serial dilution of the same α -amylase as used, with deionised water as references (must be freshly prepared each time).
2. Place the rubber band around the petri dish.
3. Pipette up to 175 μ l / 175 mg of the test samples, references and the negative control into separate wells.
4. Put the lid on after applying the sample.
5. Ensure that the rubber band fits tightly against the lid.
6. If necessary, make small adjustments to achieve a secure fit.
7. Incubate the dish at the temperature suitable for your specific α -amylase (up to 60°C) for the desired time (up to 7 days) in a heating cabinet.

Interpreting Results

- Positive result: A clear zone around the sample well indicates an α -amylase detection.
- Semi-quantification: the diameter of the clear zone of the sample can be compared with the diameter of an α -amylase reference of known concentration, allowing for a semi-quantitative assessment.
- Negative result: No clear zone around the sample well indicates either no α -amylase activity or levels below the detection limit of this test.

Waste Disposal and Recycling

- Recycle cardboard and plastic packaging.
- Discard the dish, including the gel, as regular waste.
- Ensure the product does not enter drains, waterways, or soil.

Warranty

Any change or modification in the procedure not recommended by Phadebas AB may affect the results, in which event Phadebas AB disclaims all warranties expressed, implied or statutory, including the implied warranty of merchantability and fitness for use. Phadebas AB and its authorised distributors, in such event, shall not be liable for damages indirect or consequential.



[For complete instruction for use, please read the opposite side.](#)

Brief instruction guide

1. Always use clean face covering and gloves.
2. Use a new clean tip to pipette into each well.
3. Sample can be in liquid form, slurry or syrup.
4. Place the rubber band around the petri dish,
5. Into each well, pipette/weigh up to 175 μ l / 175 mg of the sample.
6. Put the lid on after applying the sample.
7. Ensure that the rubber band fits tightly against the lid.
8. Incubate the dish at the preferred temperature, up to 60°C.
9. Incubate for up to 7 days.
10. Evaluate the results.
11. A clear zone around the well indicates α -amylase activity.
12. Semi-quantification: The activity could be estimated by comparing the diameter of the clear zone with a diameter of a known reference.
13. If no clear zone appears, α -amylase activity is below detection limit.
14. Recycle cardboard and plastic and discard the dish into normal waste.

