

TECHNICAL FAQ

Our most frequently asked questions can be found below. If the answer to your question is not listed, or you need further clarification, please contact Customer Service at <u>nqacdublincustomerservice@us.nestle.com</u>.

ACCREDITATION

What is NQAC Dublin's accreditation status?

NQAC Dublin has a flexible ISO 17025 scope. We are accredited by technology and matrices. Our laboratory does not make references to our accreditation status on our final reports; however, we make our ISO 17025 biological and chemical scopes available to our customers on our website and upon request. We also provide a list of all methods that are considered accredited under that flexible scope to A2LA annually. If you have additional questions, please contact Customer Service at <u>ngacdublincustomerservice@us.nestle.com.</u>

MICROBIOLOGY TESTING FAQ

How long are wet swabs viable?

Due to the limited viability of the microbes, environmental swab and water samples are viable for 24-36 hours after sampling. Samples received after this time range are considered compromised.



Why is my result <20 instead of <10?

The sample matrix was found to have inhibitory or thickening properties. To receive valid results, testing needed to be completed at a higher dilution.

What does the "est" on my report mean?

Our method has a range for which results are validated. If the result is under the readable range, your report will have the "est" next to the result.

Can you use pooled or composite samples for general microbiology analyses (i.e., APC, EB, E. coli)?

No, when testing is performed on pooled samples, it is not a true reflection of the individual results and there is a risk of under-reporting with such data.

Why do my results say, "Due to overgrowth of atypical colonies, (method) count was determined from the (nth) dilution?"

Although selective petrifilms and plates inhibit the growth of organisms other than the one that we are testing for, they cannot inhibit everything. While we can determine that these atypical organisms are not what we are testing for, they overgrow the film or plate, and we are unable to determine the count for our test on that dilution. Plates that are prepared at a higher dilution better allow us to accurately read targeted organisms.

Why do my results say, "Due to overgrowth of atypical colonies, (method) results could not be determined?"

When atypical colonies overgrow on the petrifilm or plates as in the scenario above, we are unable to determine a result. The initial solution to the problem is to test out to further dilutions. If this is not possible due to specification requirements, then consult with Customer Service for a solution.



How can I find out how many replicates will be needed for my microbiology sample that requires a different dilution?

Please see below for dilution conversions for commonly requested dilution factors. Customer Service should provide this information to you depending on the matrix being tested.

		Weight								
		25g	100g	125g	150g	250g	325g	375g	750g	1500g
Dilution	1:10	1	1	1	1	1	1	1	2	4
	1:20	1	1	1	1	2	3	3	5	10
	1:100	1	4	5	6	10	13	15	30	60
	1:200	2	10	10	10	25	26	25	50	100
	1:500	5	20	25	30	50	65	75	150	300
	1:1000	10	40	50	60	100	130	150	300	600
	1:2000	25	100	125	150	250	325	375	750	1500
	1:3000	25	100	125	150	250	325	375	750	1500

CHEMISTRY TESTING FAQ

What is included when I request RUSH for chemistry testing?

Rush testing turnaround time provides expedited testing and results release. Rush testing will result in a charge that is 2x the cost of the methods being requested as rush. Please note that not all methods have rush testing turnaround times available. Please reference our <u>Analysis Portfolio</u> for more information about turnaround times.

How do I receive allergen swabs from NQAC and how do I collect them?

To receive allergen swabs for testing, please contact <u>nqacdublincustomerservice@us.nestle.com</u> for assistance. Additionally, information regarding the Allergen Swab Collection process can be found <u>here.</u>



How do I submit packaging samples to NQAC Dublin for testing?

Please reference our <u>Analysis Portfolio</u> to determine the amount of material that will need to be submitted for testing. To prevent loss of analytes, ensure that the samples are wrapped in at least two layers of aluminum foil prior to submission. It is also recommended that a separate sample be submitted for each analysis requested to ensure that your samples can be processed in a timely fashion.

Can light and/or air affect the results of vitamin analyses?

Many vitamins degrade in the presence of light and oxygen. To maintain accurate results, samples intended for vitamins testing should be submitted in a container that protects the sample from light and air.

What does "Not Determinable" mean?

Not determinable is used when results are unable to be generated.

This could be due to matrix interferences/sample additives and/or response outside of the analysis' validated linear range.

In some cases, alternative approaches can be considered. Please contact Customer Service at <u>nqacdublincustomerservice@us.nestle.com</u> for guidance.

What does the phrase "uncertainty of the method" mean?

A parameter associated with the result of a measurement that characterizes the dispersion of the values that could be attributed to the measure and, with a 95% confidence interval.



What does the phrase "Intermediate Reproducibility" mean?

The relative difference between two independent single test results obtained using the same method, on identical test material at different days, which corresponds to the relative intermediate reproducibility limit, R (%), at 95% confidence level.

NOTE: For re-test samples, be aware results can vary and be impacted by storage, shelf-life, time-point, etc. Analytical reproducibility can be provided; however, repeats may not always fall within this range. Reproducibility data of a method was determined using identical test material at different days or events.

What does the phrase "repeatability" mean?

The relative difference between two independent single test results obtained using the same method on identical material in the same laboratory by the same operator using the same equipment within a short interval of time, which corresponds to the relative repeatability limit, r (%), at 95% confidence interval.

How can I ensure that the Limits of Quantification (QL) that I need for testing are achieved?

Please reference our <u>Analysis Portfolio</u> for more information regarding the Limits of Quantification for our methods. Note that due to sample matrix, the QL that we can achieve may vary. Place the required levels in the "estimated levels" column of the analysis request form or the estimated levels field for your web submissions.

If confirmation testing is needed, is this additional testing included in the price of the pesticides screen?

The duplicate confirmation analysis is performed at no additional cost for this method.



What is the difference between limit of detection and limit of quantification?

The limit of detection represents the lowest level that a method can detect, but not accurately quantify, of a compound. The limit of quantification represents the lowest limit that can be quantified for a method and remain within the acceptable accuracy of the method. Since the detection limit offers no actionable information, only the limit of quantification (QL) is reported.

Why does the limit of quantification (QL) differ for different sample matrices?

Each sample type is spiked at the QL to ensure that we can detect the compound, however not all compounds interact well with all sample matrices. If the compound can still be detected, but the recovery is lower than our quality criteria, the QL is raised to the level that corresponds to the confidence of detection.

Why does my final report show multiple results for the same test when I only requested that the test be completed once?

In most cases, the additional test results will be listed when your sample contained a detectable component in your requested analysis. The second test is the confirmation test completed by NQAC to ensure the accuracy of the original set of results. This may also occur when a compound is detected that might be volatile. In this case, the test is repeated in duplicate to confirm the original result. If the variability of the three results is within the uncertainty of the method, all three results are provided on the final report.

Why is the turnaround time longer when there is a detection in my sample?

Confirmation testing is completed on any volatile detection found for a sample. A new aliquot of the original sample is tested to ensure that the detection found is not a "false positive". The extended turnaround time is used to confirm the original result.



May I request a retest?

Requests at customer request are welcome. Please note that in situations where the original homogenized retain sample is no longer available for testing, it is not recommended to use only analytical reproducibility to evaluate statistical equivalence. Results may vary and be impacted by storage, shelf-life, time-point used and if these factors are not controlled must be accounted for when evaluating the results. When retests meet data acceptability requirements, they will be billed per our retest policy at listed price.

What does "original container" mean?

Another un-opened finished product container or a sub-sample which matches the original submission from the same time-point sent. Retest results have been proven to vary and may be impacted by storage, shelf-life, time-point used and if these factors are not controlled must be accounted for when evaluating the results.

What is a retest appropriate sample?

A homogenized subsample from the original sample(s) submitted for analysis. This is not applicable on another original container or homogenized sample from another submission or analysis which need to processed using an original container.

Can I request quantification below the LOQ?

Establishment of the LOQ is a requirement of method validation. Any signal from an instrument below this range is not scientifically defensible and can see great variance in both accuracy and precision. For these reasons, requests for estimated levels below the LOQ are unable to be provided.



Why is it important to have a clear sample description, ingredient list, specifications to support my submission?

Analytical methods are determined fit-for-purpose based on matrix, ingredients and linear range. To meet published turnaround times, it is critical this information is provided and clear. If you do not have this information consider replicate testing or selection of replicate methods (contact the Customer Service group for support). If information is unclear or unavailable, please consider risk of delayed turnaround time.

Are purity evaluations of raw materials offered?

The majority of our portfolio can provide results for pure components, however please consider the linear range of the method as well as measurement uncertainty prior to submission.

In these cases, it is highly recommended that a COA be included with the sample submission paperwork.

If a COA is not available, please provide as much information regarding purity as possible in the special sample instructions. In cases where COA is not available there is a risk of delayed results and additional costs.