

Tech Tip 0023 - Reference Standards Fill Weight

ChromaDex is pleased to offer a wide range of reference standards in our phytochemical catalog. All materials listed are supplied either neat or in solution and sold by either a weight or volume quantity. Sometimes our clients have questions about how much product is in each bottle or ampoule. This Tech Tip should help to address such questions.

ChromaDex overfills each unit of product by up to 0.2 mg. This typically means that a 5mg unit may contain between 5.0 and 5.2mg of material; a 10mg unit contains between 10.0 and 10.2mg of material. Products sold by volume are overfilled by 0.1ml.

The use of accurate weight measurements and fully characterized Primary grade reference standards is crucial for proper quantitative analysis. A five place balance (measuring accurately to 0.00005mg) is required for use in quantitative work.

ChromaDex recommends that a "weigh by difference" technique be used when preparing your reference standard solutions for use in the laboratory. The proper protocol is detailed in the ChromaDex Tech Tip 0003 Recovery and Dilution Procedures. Especially when dealing with oily, sticky, fluffy, or static prone compounds, improper handling can result in large losses of material between the original packaging and the prepared solution in your laboratory.

Because of potential material loss in transferring by the end user, ChromaDex does not supply an exact weight value for each unit of reference standard. Even if an exact weight was supplied, the end user must accurately weigh the amount of product that goes into their standard preparation as this minimizes analytical error.

For special projects, ChromaDex can supply exact weights per vial when requested by our clients. An additional fee may apply in such cases. Please contact your ChromaDex sales representative for more information if this service would be useful for you.

ChromaDex packages all items carefully to minimize any product loss. However, sometimes shipping conditions beyond our control can cause leakage or an otherwise reduced quantity of material. If you suspect that your order contains less material than it should, please first follow the weighing protocol as detailed in ChromaDex Tech Tip 0003 Recovery and Dilution Procedures. If after using this protocol, you cannot verify the correct quantity, please contact your ChromaDex sales representative with the weight measurements and any photos showing bottle leakage that might help us in trouble shooting the issue.