

Reagents

Development

For more than thirty years, Tintometer in Dortmund has been manufacturing reagents for water testing and marketing these reagents around the world under the brand name Lovibond®.

Different forms of reagents are required for different fields of application. It is fair to say that, in terms of quality, tablet reagents are the best form of reagent. Thanks to production techniques of the type used in the pharmaceutical industry and stringent internal quality standards, Tintometer is able to produce tablet reagents for water testing with a guaranteed shelf life of 5 or 10 years. These tablets are individually sealed in high-grade, polyethylene-coated aluminium foil and represent the reagent form of choice for everyday water testing applications.

Users in different countries traditionally prefer forms of reagent other than tablets. Lovibond® powder reagents are designed to allow fast and easy testing.

Powder reagents are packed in aluminium foil for a wide range of applications and producers represent an alternative reagent form recently introduced by Tintometer.

Last but not least, liquid reagents are indispensable for many testing tasks. Testing for substances that are hard to detect, for parameters like total nitrogen, or for the aggregate parameter COD, require the use of a wide range of reagents in a form that permits more "aggressive" sample processing. The Lovibond® programme is rounded off by reagent tests and tube tests, making Tintometer GmbH the only reagent producer in the world that offers a complete range of reagent forms.

DPD reagents

DPD reagents are offered by different manufacturers. For quality reasons, users should validate the products prior to use.

DPD reagents are produced on the basis of international standard methods and the ISO standard method. The chemicals are of crystalline **white** nature. If a reagent (tablets or powder) is **not white** but has turned grey/brownish or purple in colour, it has deteriorated. DPD liquid reagents which should be colourless when fresh and may turn brownish in colour if the reagent has deteriorated. The use of deteriorated products must be avoided as they will give false results.

Tablet reagents

Our test tablets are manufactured in Germany under tightly controlled conditions on the latest machinery.

Maintaining the highest quality standards permits Tintometer GmbH to guarantee our reagent tablets for a minimum of 5 years, and some for as long as 10 years.

We can make this promise because each tablet is hermetically sealed within an individual aluminium foil pocket, protecting against challenging environmental conditions. This packaging keeps each tablet in perfect condition, right up until the time it is needed by the user.

Test tablets remain the most consistent and reliable reagent format available, consistently outperforming other reagent formats, and delivering maximum accuracy for the user.

Now we have improved even further on this highly successful format. To the tight quality control processes, integral to Lovibond®'s tablet manufacture, and the simple test procedures, we have added new blister packaging.

Our new aluminium foil blister packaging brings added convenience to the tradition of protection achieved in Lovibond®'s long established tablet production technology.

With the new blister strip, the user just pushes the tablet through the protective foil, straight into the sample. Simple, time-saving and practical.

This type of packaging, long established in pharmaceutical applications, combines all the advantages of protective foil, with convenience for the user.

Each tablet is contained within an individually formed foil cup, lined with the latest aluminium composite material, and guaranteeing product performance.

As a result of improved sealing efficiency, the blister pack has been reduced in size to 91 x 34mm making them even more convenient for storage and shipping.

'BT' is added to the end of the code to identify the new style of packaging. (For example – 511060BT).

There are no safety risks if the tablets are used in line with the instructions supplied. Safety data sheets are available for all reagents.

Specifications and Certificate of Analysis

To express the high quality standard of Lovibond® tablet reagents, specifications for each type of tablet as well as a "Certificate of Analysis" for each lot is available in the down-load area at www.lovibond.com.



Tube tests

Lovibond® tube tests enable the user to easily perform highly sensitive and precise water testing.

When using tube tests measurement is considerably faster and easier, particularly in the case of standard and serial tests.

The tube tests contain a precisely measured amount of reagent, thereby avoiding the presence of superfluous chemicals and optimising test safety.

Up to six different measuring ranges are available for the various tests.

The tubes are made of special optical glass with a 16 mm in diameter. They are supplied in a storage and dispatch box together with the digestion or auxiliary reagents. This packaging unit contains 24 or 25 reaction vials and up to 2 zero vials for photometer system calibration.

Liquid reagents

As a rule, liquid reagents do not consist of a single preparation but comprise several components that need to be added to the sample in a certain order. As both the size and the number of drops have a decisive effect on the resultant colour complex, the reagents need to be added with a high degree of precision.

The useful life of liquid reagents is reduced by temporary contact with oxygen in the air when the bottle is opened as well as by unsuitable storage environments (presence of sunlight or high temperatures). Provided that the bottles are stored within the temperature range +6°C to +10°C, the Lovibond® DPD and Phenol Red solutions can be used for a period of one year from the production date.



VARIO Powder Packs

The fast and easy use of VARIO Powder Packs has made them extremely popular for water testing applications in many countries throughout the world.

The Lovibond® Powder Pack programme provides more experienced users with a real alternative to existing measurement systems.

The Vario Powder Packs are produced to the same high quality standards that have made Tintometer's tablet reagents so successful for several decades.

Parameters from aluminium and chlorine through to sulphate are just some of the well-known tests that are included in the VARIO Powder Pack range.

Their chemical properties is suitable also for use with Hach-Photometer-Systems.



Detailed information see pages 96 - 103

Membrane filter set

For use when preparing samples for photometric measurements

Advantages

- removes turbid materials from samples
- differentiates between dissolved and total substances
- 0.45 µm mesh meets the requirements of the official German unitary procedure for water testing

To prevent the effects of light scatter, it must be ensured that all turbid materials are removed from the sample before photometric measurements are carried out. This can be achieved with the Lovibond membrane filter set. Where certain methods are employed (e.g., iron, manganese, CSB, etc.) a membrane filter set must be used to differentiate samples in terms of dissolved and total substances. The filter mesh size of 0.45 µm is in accordance with the official German unitary procedure for water testing.

Order code: 36 61 50

(covers 25 x 0.45 µm membrane filters and two 20 ml syringes)

