



Standards for LSC

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Hidex provides 3 H and 14 C standard sets for testing Hidex 300 SL and Hidex Triathler scintillation counter performance, as well as internal standard capsules for preparing own 3 H and 14 C standard solutions.

The unquenched and quenched standard sets are manufactured for Hidex by Eckert & Ziegler. They are prepared gravimetrically from NIST traceable solutions. After preparation, all standards are QC tested with calibrated counting system of Eckert & Ziegler. Uncertainties are estimated using the guidance in

NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results".

The radioactivity levels of the ³H and ¹⁴C components of these standards are far below the threshold levels specified in the International Air Transportation Administration (IATA) regulations pertaining to Dangerous Goods and are therefore not classified as radioactive material in transportation. The deliveries include QA test certificate and MSDS.



Unquenched LSC Standard Set of ³H, ¹⁴C and Blank

A set contains ³H, ¹⁴C, and a background sample. Standards are prepared gravimetrically from NIST traceable solutions and flame-sealed in glass ampoules. The set can be used for verification of instrument performance. Manufactured for Hidex by Eckert & Ziegler.

³H activity: 5 kBq (300,000 DPM) ¹⁴C activity: 2.16 kBq (130,000 DPM)

Cat. No. 462-307 Unquenched standard set for ³H, ¹⁴C and Blank for LCS calibration, 7 ml ampoules

*Contains toluene, UN 1294 for transportation

Cat. No. 462-320 Unquenched standard set for ³H, ¹⁴C and Blank for LCS calibration, 20 ml ampoules

*Contains toluene, UN 1294 for transportation





Quenched LSC Standard Set of ³H and ¹⁴C in DIN and toluene

Each set contains ten (10) pcs of 20 ml ampoules of either ³H or ¹⁴C standard samples with constant level of activity and variable level of quenching. The quench sets are available either in toluene or in di-isopropyl naphthalene (DIN) solvent. Intended use is creating either External standard - or TDCR-quench curves. Sample volume 15 ml. Standards are prepared gravimetrically and flame-sealed in glass ampoules. Manufactured for Hidex by Eckert & Ziegler.



³H activity /vial: 4.17 kBq ³H +/- 20% (250,000 DPM)

³H total activity /set: 41.7 kBq

¹⁴C activity/vial: 1.67 kBq ¹⁴C +/- 20% (100,000 DPM)

¹⁴C total activity/set: 16.7 kBq

Cat. No. 462-8314

Cat. No. 462-7303

3H DIN Quenched Standard Set, 10 x 20 ml vials

Cat. No. 462-7314

Cat. No. 462-8303

3H Toluene Quenched Standard Set, 10 x 20 ml vials

*Contains toluene, UN 1294 for transportation

¹⁴C Toluene Quenched Standard Set, 10 x 20 ml vials

*Contains toluene, UN 1294 for transportation

Internal Standard Kits for LSC

To allow convenient, accurate quench correction, Hidex supplies a range of Internal Standard Kits of ³H and ¹⁴C with known activity (DPM). Each kit contains 40 glass capsules with activity in dried form, processed in pressthrough strips. You simply drop a capsule into the vial, let the activity dissolve and count to find out the counting efficiency. The activity is either in water soluble or organic soluble form. The former is first dissolved in water and cocktail then added. The latter can be directly dissolved in a lipophilic cocktail.

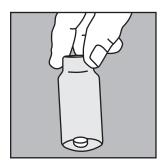
The absolute activity of each type of Internal Standard capsule has been calibrated by comparison with reference standards of the National Institute of Standards and Technology (NIST), USA. Capsules will keep to within 1% of absolute activity for at least one year from the date of calibration. The standards are manufactured for Hidex by PerkinElmer.

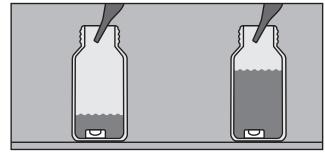
³H activity/capsule: near 200,000 DPM ¹⁴C activity/capsule: near 100,000 DPM

Expiration date: 5 years from the date of preparation.

Cat. No.	462-011	³ H water soluble	box of 40 capsules
Cat. No.	462-012	³ H organic soluble	box of 40 capsules
Cat. No.	462-013	¹⁴ C water soluble	box of 40 capsules
Cat. No.	462-014	¹⁴ C organic soluble	box of 40 capsules









About Hidex







Hidex is a family owned high technology company which develops and manufactures high performance analysis equipment for life science research, nuclear measurements and nuclear medicine. Our products utilize modern technology and excellent tradition of workmanship. With strong links to the scientific community we continue to innovate and develop to improve scientific research and safety of everyday life.

Products

HIDEX 300 SL

A very compact automated TDCR Liquid Scintillation Counter featuring absolute activity/DPM without external radioactive standards enabling a wide variety of applications.

Automatic TDCR Liquid Scintillation Counter



Super Low Level TDCR Liquid Scintillation Counter

RADIOWATER GENERATOR

An automated production system for ^{15}O -labelled H_2O for Positron Emission Tomography studies.



TRIATHLER

A single-sample counter, which provides fast and accurate results for several life science and environmental applications, measuring all radioisotopes including tritium in a variety of sample formats.







Gamma Counter

HIDEX SENSE

The Hidex Sense microplate reader is loaded with several unique innovative features to provide full flexibility at top performance. With touchscreen operated software and the compact application ready microplate reader, we turn your applications into results, simply at your fingertip.



Contact Hidex

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