



Legislation and hesitation

The world is going crazy over food scares. Consumers want laws to protect them and some of the laws can seem extreme. Meanwhile, the media waits to whip up the next sensation ...

... which could be you!

In the face of this situation, it's no surprise we hesitate occasionally before giving the all-clear to a production run. Are the surfaces clean? Who cleaned them and are they reliable? Which benchmarks are we using for confirmation? What if the temperature has dropped – or risen? Is the rinse water clean? How long do we have to wait to find out?

However hesitation costs money, kills brands and can harm consumers.

Can you spare a minute?

This is the dilemma that led Merck to develop HY-LiTE® 2, a rapid, on-the-spot hygiene detection system. HY-LiTE® 2 provides crucial, accurate, instant and comparative data on the efficiency of cleaning regimes and personnel. The results are not affected by temperature change. It also alerts management to potential problem areas that might need special attention – immediately and over the long term.

HY-LiTE® 2 provides definitive test results in just 60 seconds. A single minute might help to spell the difference between a trouble-free production run and a contaminated one. Shouldn't you find the time?





The sampling pen

This is a pre-prepared, one-shot device available in two formats – for surface testing – and for rinse water control. Containing all the reagents necessary in the correct amounts, each pen is a combined sampling device, test chamber and reagent-dispenser in one.

The HY-LiTE® 2 luminometer

Robust, lightweight and fully portable, the luminometer has a large, easy-to-read graphic display and a built-in printer.

The luminometer can be operated as a test only device, with direct printout of results; as a Test and Store device, storing up to 2000 results for later printing or for downloading to a PC; or as part of an HACCP Plan using TREND 2 software, a powerful analysis and data presentation package running under Windows NT and above.



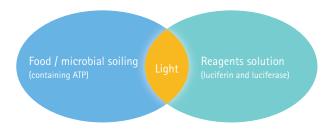


- Easy 5 button operation
- Windows-based TREND 2 analysis software
- Automatic calibration self-check
- Automatic temperature compensation
- Memory for 1000 results
- Operates from batteries or on the mains
- Built-in printer
- Fully compliant to DIN 10124

HY-LiTE® technology

The best method – available for measuring hygiene and cleaning

The ATP Technology



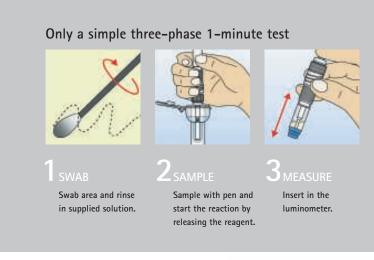
The dirtier the surface, the brighter the light.

How the system works

The HY-LiTE® 2 hygiene tracking system works by detecting ATP (adenosine triphosphate), a substance found in all living cells and in most biological material. Unlike traditional microbiological methods, which detect the presence of bacteria and other microorganisms, ATP detection also reveals the presence of residues, even on superficially sterilised surfaces, potentially capable of supporting microbial contamination.

A sample taken from the test area is mixed with enzyme reagent in the specially developed HY-LiTE® Pen. Any ATP present reacts with the enzyme and produces light. This is measured in the HY-LiTE® 2 meter. The more ATP present, the brighter the light and the greater the reading. This indicates clearly the amount of microbiological contamination, food residue or -animal debris in a crevice, on a surface, or in a rinse water sample.

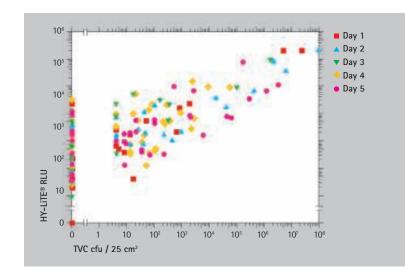
The pen has a unique built in inhibition protection.





Raw meat cutting / packaging HY-LiTE® vs Total Viable Count

 These results show that HY-LiTE® is better than microbiology because it detects residues on even sterile surfaces.



The whole truth ...

- A more sensitive way of measuring hygiene or the effect of cleaning than traditional microbiology methods, which identify the organisms present but overlook the hidden potential of soiling for microbial growth.
- Unlike traditional microbiology, HY-LiTE® can detect biological residues on surfaces which have just been rendered sterile by chemical disinfection but still retain the potential for contamination.
- Very sensitive test can detect very low levels of soiling.
- HY-LiTE® swab testing allows better in-depth and aggressive investigation of surface hygiene than traditional microbiology methods, eg Contact plates.
- Recognised as a superior method of hygiene monitoring in the food and beverage industries in independent tests.

... and nothing but the truth!

- The unique HY-LiTE® Pen gives superior-detection of food residues and microbial contamination on surfaces and rinse waters.
- A long shelf life guarantees reliability.
- Integral buffer solution ensures results are unaffected by sample conditions.
- No pre-preparation or manipulation of reagents so that there is a minimal room for human error given.
- Self calibrating luminometer guarantees accuracy and reliability.
- · Not affected by temperature changes.





HY-LiTE® 2 – a very practical tool



Also applicable in the beverage and dairy industry.

Saves time, money and materials

- Simple to use.
- Produces results within one minute. Can be used by production workers immediately after cleaning, allowing any corrective action to be taken before production begins.
- Instant results ensure immediate feedback, enabling personnel to check the effectiveness of new cleaning procedures and for staff training.
- Reliable monitoring of cleaning procedures optimizes the use of cleaning agents and proves reliability of CIP techniques.

Can be used anywhere

 Easily portable, designed to give reliable, in-depth results on the spot and away from lab conditions.



Better management control

- Luminometer holds data from 1000 tests enabling trends to be identified as well as seeing the before-and-after effect of cleaning procedures.
- Captured data can be downloaded to Windows programmes and integrated into HACCP software.
- Data can be analysed and made available for Management Information purposes.
- Trend analysis allows monitoring of continuous improvements in hygiene standards.
- PASS / FAIL limits can be programmed to take account of different sites and processes.
- Quality-assured.
- Technical advice and assistance.
- Installation and staff training.



Applicable in all food industries.

Ordering information

Product	Description	Ord. No.
HY-LiTE® 2 Compact Kit	1 HY-LiTE® 2 System with built-in printer	1.30100.0301
(in bag)	1 Certificate	
	1 Mains power supply with worldwide adapters	
	1 Lithium activation card	
	1 Battery holder	
	4 Batteries (Type: AA, LR6, Mignon)	
	1 PC-cable	
	1 Paper role for printer	
	1 CD-ROM with TREND 2 PC-Software, HY-LiTE® 2 Operator Manual in 5	
	languages (EN, ES, ES, FR, PL) and Video-guide for HY-LiTE® Pen-handling	
HY-LiTE® 2 Refill Pack	100 HY-LiTE® Pens and 100 swabs for surface testing	1.30101.0021
HY-LiTE® Pens	50 Pens for CIP rinse water testing	1.30102.0021
HY-LiTE® Paper Rolls	5 Paper rolls for HY-LiTE® 2 built-in thermoprinter	1.30110.0205
HY-LiTE® Jet A1 Fuel Test Kit	20 Fuel Test pens, 20 large pipettes and 20 small pipettes	1.30196.0021



Merck KGaA 64271 Darmstadt, Germany Fax +49 (0) 61 51/72-60 80 E-mail: mibio@merck.de www.merck-chemicals.com

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose. HY-LiTE® is a registered trademark of Merck KGaA, Darmstadt, Germany.