



Scintillation Cocktails

Application and quench of ROTISZINT® eco plus

- For solutions and filter discs
- Very high sample acceptance capacity
- High counting efficiency
- Low photo- and chemoluminescence
- Very good colour- and chemical quench resistance
- Environmentally safe and non-carcinogenic
- Low vapour pressure
- Virtually odour- and colourless
- High flash point
- Biodegradable
- No permeation through plastic vials

Multi-purpose, ready-to-use scintillation cocktail for Liquid Scintillation Counting (LSC) of β radiators (e.g. ^3H , ^{14}C , ^{32}P). Excellent sample acceptance capacity for all aqueous and organic samples, optimally suited for solutions with high ionic strength.

ROTISZINT® eco plus is produced without benzene, toluene, xylene and pseudocumene. In ROTISZINT®-eco plus, di-isopropyl naphthalene (DIN) is the base reagent of primary scintillators. The cocktail is free of carcinogenic or environmentally dangerous reagents. Through its emulsifying character, ROTISZINT®-eco plus elutes samples from filter plates, thus making it also suitable for counting of filter samples.

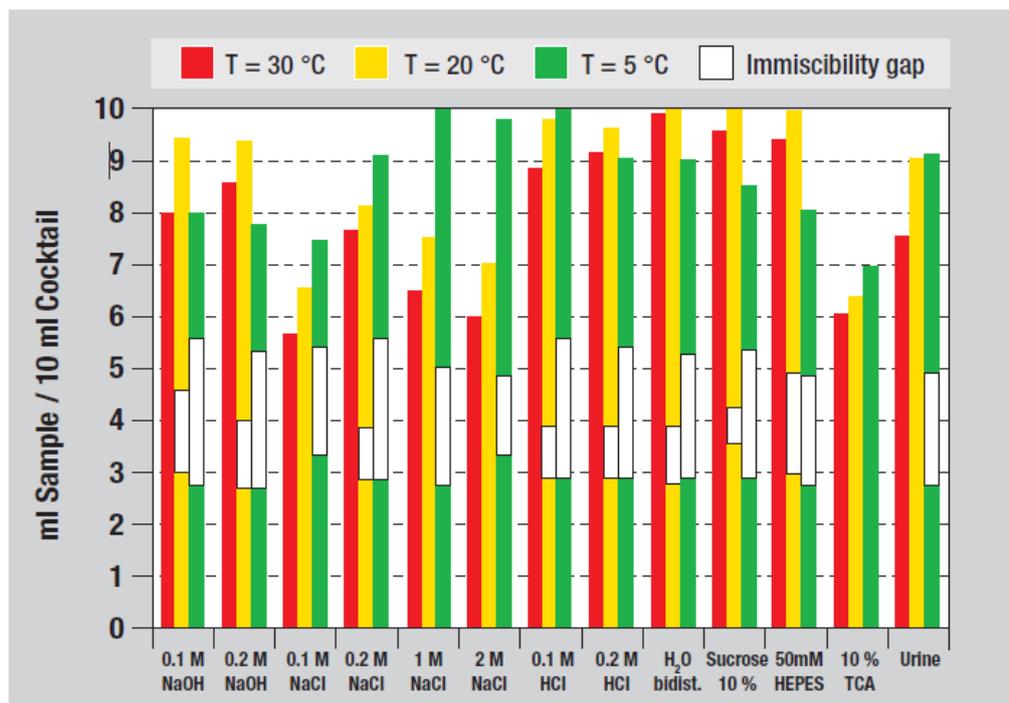
Recommendations for application:

1. **Efficiency** in solution (^3H) 47 %, (^{14}C) 90 %
2. For reliable quantitative **elution** we recommend addition of a sample specific elution buffer. Please note: Use of alkylating elution buffers may cause chemoluminescence.
3. For efficient **drawing** we recommend the use of ROTILABO®-dispensers (Art. No. Y837.1-Y842.1). In order to completely remove all the liquid, the inner withdrawal tube may be replaced with a longer Teflon® or polyethylene tube (6 mm inner \varnothing), or by telescopic suction pipe (Art. No. AA92.1).
4. Please note when measuring **filter discs**: ROTISZINT® eco plus contains emulsifying components and elutes the samples from the discs. This increases measuring efficiency, however involves the risk of non-quantitative elution, so that the measurements may not be reproduced as reliably in some cases. The rate of yield when eluting from filter discs can be increased by adding tissue solutisers, whereby the chemical and colour quench are also increased. It must be determined for each individual experiment which mixture is suitable.
5. The **immiscibility gap** is characterized by two phases and may not be used for measurement. By increasing or reducing sample amount in relation to scintillation cocktail, the immiscibility gap may

Technical Info

be avoided. Sample acceptance capacities of PBS, TBS etc. equal this of 0.1 M NaCl.
 Sample acceptance capacities of BSA solutions, cell culture supernatants etc. equal this of HEPES.

Figure: Typical sample acceptance capacity



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