PRODUCT SHEET

GoldStar Quanta Cocktail

Main Applications

Liquid scintillation counting of aqueous samples.

Packing

Order N°.	Description	Packing
ME-COC-GSQ	Gold Star Quanta	2 x 5 L bottles

Physical and chemical properties

Solvent : DIN

Flash point : 140 °C

Conditions of utilization

Recommended T of utilization: 10 – 20°C

Storage: Dry and dark, T<30°C

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TECHNICAL INFORMATION

GoldStar Quanta

GoldStar Quanta is a high flashpoint DIN based, biodegradable LSC cocktail that contain NPEs and that is thus not drain disposable.
It is a very high efficiency version of GoldStar that works with most dilute aqueous samples. It can accept up to 5.0 mL sample in 10 mL cocktail at 20°C and has even higher sample capacity at lower temperatures making it ideal for use with chilled LSC counters.

GoldStar Quanta gives approximately 55% Tritium efficiency unquenched and shows a low background count rate of < 20 CPM in a 0 – 18,6 keV window (^{3}H). It is thus very well suited especially for low level tritium measurements.

Table 1: Sample capacities at 20°C and 14°C

Sample type	20°C	14°C
Deionised water	3.00 ml*	3.00 ml*
0.01M PBS (pH 7.2)	8.25 ml	10.00 ml
0.1M PBS (pH 7.2)	6.90 ml	10.00 ml
0.2M NaH_2PO_4 (pH 4.9)	6.00 ml	8.00 ml
0.1M HCl	8.20 ml	10.00 ml
0.1M NaOH	9.00 ml	10.00 ml
1.0M NaOH	1.10 ml	1.20 ml
0.5 M NaCl	6.90 ml	10.00 ml
1.0M HCl	3.10 ml	2.70 ml
1.0M HNO_3	2.10 ml	2.00 ml
1.0M H_3PO_4	9.50 ml	9.50 ml

** Forms a semi-gel between 3.00 and 3.50 in 10.00 ml Gold Star Quanta and then is clear up to 10.00 ml in 10.0 ml Gold Star Quanta.*

Gold Star Quanta is also suitable for use with all commonly used alkaline solubilisers.

Table 2: Chemiluminescence with 1.0 ml solubiliser added to 10.0 ml Gold Star Quanta (cpm in 0-18.6 keV window)

	5 min	10 min	15 min	20 min	25 min	30 min
GoldiSol	23 cpm	19 cpm	20 cpm	21 cpm	19 cpm	20 cpm
Soluene-350	38 cpm	27 cpm	19 cpm	22 cpm	19 cpm	20 cpm
0.1M NaOH	18 cpm	18 cpm	20 cpm	17 cpm	18 cpm	17 cpm