

LIQUID SCINTILLATION MEDIA

Fluors containing non-hazardous, non-toxic (NHNT) solvents are required unless a specific exception is obtained from the RSO or the Radiation Safety Committee. Examples of such fluors are:

<u>Flour (Mfgr.)</u>	<u>H-3 Efficiency*</u> <u>Mean ± SD (N)</u>	<u>Flow*</u> <u>(sec)</u>	<u>Fluor (Mfgr.)</u>	<u>H-3 Efficiency*</u> <u>Mean ± SD (N)</u>	<u>Flow*</u> <u>(sec)</u>
BCS (AMER)			Betamaz-ES (ICN)	45.1 ± 7.9 (6) ¹	2.6
Bio-Safe II (RPI)	38.1 ± 5.2 (24) ²	4.1	Bio-Safe NA (RPI)	43.9 ± 9.8 (6) ¹	2.5
Cytoscint-ES (ICN)	43.7 ± 4.0 (24) ²	3.7	Ecolite (+) (ICN)	32.1 ± 5.1 (24) ²	5.3
Ecolume (ICN)	36.6 ± 6.0 (24) ²	4.9	Ecoscint A (NAT)	40.2 ± 4.5 (24) ²	3.7
Ecoscint H(NAT)	45.8 ± 5.0 (24) ²	2.7	Ecoscint O (NAT)	45.1 ± 6.7 (6) ¹	2.8
Envirosafe (ANOR)	35.4 ± 4.6 (24) ²	4.2	Mono Flow 5 (NAT)	35.6 ± 3.7 (24) ²	2.7
Opti-Fluor** (PACK)	39.7 ± 5.5 (24) ²	3.2			
OrganicSolv 3 (ANOR)	42.2 ± 9.7 (6) ¹	2.5			
Ready Safe (BECK)	40.6 ± 4.2 (24) ²	7.2			
Ultima Gold (PACK)	43.1 ± 2.1 (24) ²	5.5			

Fluors containing toxic or flammable solvents may not be purchased without prior approval from the RSO. Examples are:

CP, HP, HP/b, EP, MP, NA, Ready Micro, Ready Solv, Ready Protein, Ready Gel, Ready Value, Ready Organic, Ready Flow II, Ready Flow III (BECK)

Universall (ICN)

Betafluor, Hydrofluor, Liquiscint, Monoflow 4, Ultraglow (NAT)

Aquasol, Aquasol-2, Econofluor, Exonofluor-2, Formula 963, Liquifluor, Omnifluor, Atimlight, Aquasure, Biofluor, Riafluor, and all "NEF" numbers (NEN)

Insta-Gel XF, Scit-A XF, Pico-Aqua, Pico-Fluor 15, Pico-Fluor 40, Hionic Fluor, Filter-Count, Pico-Fluor LLT, Insta-Fluor, Permafluor V, Monophase S, Flo-Scint I, II, III, IV, and V (PACK)

* Tritium counting efficiencies are based on 0.1 mL sample in 4.0 mL fluor; "Flow" represents the time for a fixed volume to flow from a pipette and is inversely proportional to viscosity; data from Klein, RC and Gershey, EL, 'Biodegradable' liquid scintillation counting cocktails, Health Physics 59:461-470, 1990.

1 Non-aqueous cocktail

2 Multipurpose cocktail

AMER = Amersham Corp., Arlington Heights, IL 800-323-9750

ANOR = Anorak Scientific, South Hackensack, NJ

BECK = Beckman Instruments, Fullerton, CA 800-742-2345

ICN = ICN Radiochemicals, Irvine, CA 800-854-0530

ISO = Isolab, Inc., Akron, OH 800-321-9632

NEN = Dupont-NEN Products, Boston, MA 800-551-2121

NAT = National Diagnostics, Manville, NJ 800-526-3867

PACK = Packard Instrument Co., Downers Grove, IL 800-323-1891

RPI = Reasearch Products International Corp., Mount Prosrpct, IL 800-323-9814