

Technical Note

Customize Dissolution Media Volumes Utilizing J.T.Baker® DILUT-IT™ Dissolution Media Concentrates

From time to time, a different or unique final volume of media is needed during your dissolution work. Avantor Performance Materials has provided these technical guidelines for reference while using our J.T.Baker® DILUT-IT™ dissolution media concentrates. This technical note will provide you with two options that can be referenced to achieve your desired final volume of dissolution media quickly and easily.

Customized Dissolution Media By Volume

Media Dilution Table

Buffer Concentrates	500 ml	1 l	10 l
Salts/ Hydrochloric Acid	19.2 ml	38.5 ml	384.6 ml
Sodium Dodecyl Sulphate (SDS)	33.3 ml	66.6 ml	666.0 ml

Follow the salt/acid recipes listed above for the concentrates and dilute media to final volume with purified water.

* Note use the SDS recipes for the SDS products

* Note you still need to dilute to a final volume, not weight with water.

J.T.Baker® DILUT-IT™ dissolution media concentrates are available in four different bottle sizes (250 ml, 500 ml, 1 l, and 2 l) to accommodate varying dissolution testing needs. The following table provides a complete list of available J.T.Baker® DILUT-IT™ dissolution media concentrates which contains the densities of the solutions to convert to weight by simply multiplying the density by the appropriate volume:



Composition of Avantor Dissolution Media

Potassium Phosphate Buffers (0.05M in dilute state)

Product	Code #	Conc. factor	Density, g/ml 25°C	KH ₂ PO ₄ g/l	NaOH g/l
pH 5.8	BD012	26 x	1.1170	176.9	3.74
pH 6.0	BD013	26 x	1.1190	176.9	5.83
pH 6.8	BD014	26 x	1.1357	176.9	23.29
pH 7.2	BD015	26 x	1.1494	176.9	36.08
pH 7.4	BD019	26 x	1.1525	176.9	40.66
pH 7.5	BD016	26 x	1.1553	176.9	42.63

Sodium Phosphate Buffer (0.05M in dilute state)

Product	Code #	Conc. factor	Density, g/ml 25°C	NaH ₂ PO ₄ g/l	NaOH g/l
pH 6.8	BD021	26 x	1.1473	179.4	23.22

Sodium Acetate Buffer (0.05M in dilute state)

Product	Code #	Conc. factor	Density, g/ml 25°C	CH ₃ COONa · 3H ₂ O g/l	Acetic Acid g/l
pH 4.5	BD017	26 x	1.0262	77.74	43.716

Hydrochloric Acid

Product	Code #	Conc. factor	Density, g/ml 25°C	HCl g/L
0.01 N	BD010	26 x	1.0027	9.48
0.1 N	BD011	26 x	1.0431	94.80

Sodium Lauryl Sulfate (0.5 % (w/v) in dilute state)

Product	Code #	Conc. factor	Density, g/ml 25°C	SLS (SDS)* g/L
0.5 %	BD018	15 x	1.0072	75.00

*(Sodium Dodecyl Sulfate)

Simulated Gastric Fluid

Product	Code #	Conc. factor	Density, g/ml 25°C	NaCl g/l	NaOH g/l
SGF	BD020	26 x	1.0650	52	69.056

Note 1: All weights mentioned above are calculated based on the pure chemicals.

Note 2: No preservatives are added to any of these concentrate solutions



Customer Service & Sales Support

Austria

Tel.: +43 1 97 002 0
Email: info.at@vwr.com

Belgium

Tel.: +32 (0) 16 385 011
Email: vwr.be@vwr.com

Czech Republic

Tel.: +420 321 570 321
Email: info.cz@vwr.com

Denmark

Tel.: +45 43 86 87 88
Email: info.dk@vwr.com

Finland

Tel.: +358 (0) 9 80 45 51
Email: info.fi@vwr.com

France

Tel.: 0 825 02 30 30* (national)
Tel.: +33 (0) 1 45 14 85 00 (international)
Email: info.fr@vwr.com
* 0,18 € TTC/min

Germany

Tel.: 0800 702 00 07* (national)
Tel.: +49 (0) 6151 3972 0 (international)
Email: info.de@vwr.com
*Freecall

Hungary

Tel.: +36 52 521130
Email: info.hu@vwr.com

Ireland / Northern Ireland

Tel.: +353 (0) 1 88 22 222
Email: sales.ie@vwr.com

Italy

Tel.: +39 02 3320311
Email: info.it@vwr.com

The Netherlands

Tel.: +31 (0) 20 4808 400
Email: info.nl@vwr.com

Norway

Tel.: +47 22 90 00 00
Email: info.no@vwr.com

Poland

Tel.: +48 58 32 38 200
Email: info.pl@vwr.com

Portugal

Tel.: +351 21 3600 770
Email: info.pt@vwr.com

Spain

Tel.: +34 902 222 897
Email: info.es@vwr.com

Sweden

Tel.: +46 (0) 8 621 34 00
Email: kundservice.se@vwr.com

Switzerland

Tel.: +41 (0) 44 745 13 13
Email: info.ch@vwr.com

UK

Tel.: +44 (0) 800 22 33 44
Email: uksales@vwr.com

Corporate Headquarters

Avantor, Inc.
3477 Corporate Parkway
Center Valley, PA 18034 USA
www.avantorinc.com
Toll Free: +1-855-AVANTOR (1-855-282-6867)
Outside of US Tel: +1-610-573-2600

Avantor, Inc. Europe

Poland Spółka Akcyjna
ul. Sowińskiego 11
44-101 Gliwice, Poland
Tel.: +48 32 2392 000
avantor.pl@avantorinc.com
www.avantorinc.com