

SOLVENT PURIFICATION SYSTEM

Ultimate Solvent System





GlassContour[™] solvent purification system is designed according to "Safe and Convenient Procedure for Solvent Purification", jointly writ–ten by Dr. Robert H. Grubbs who is a Noble Prize winner in Chemistry section.

NIKKO HANSEN&CO.,LTD.

Glass Contour

This system provides a completely safe way to purify a solvent without endangering researchers, laboratory staffs and surrounding equipment. It is field-tested and proven with over 700 installations in laboratories across USA and Japan various parts of the world.

COMPLETELY NON-HAZARDOUS

No heating, no bulky distillation equipment, no dehydrating or deoxygenating reagents, no need for vacuum transfer, and no need for supervision or long cooling process.

It is safe and you can increase your productivity in research work and experiments.

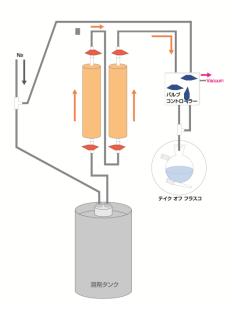
Mounted on a stainless steel frame and constructed using high quality stainless steel material including Swagelok pipes, tubes, fittings and valves, Glass Contour system is ideal for earthquake or disaster-prone region.

ACCURATE & CONVENIENT

Once Glass Contour system is setup, purified solvent is immediately available at a turn of the dispensing tap, at any amount you need. A 20L stainless steel solvent ensures you have ample supply all the time, and each set of columns can purify up to 400L of solvent before the need to replace.

Low maintenance, convenient and safe access to pure, dry, oxygen-free solvent at any time.

System Flow



① Inert gas is supplied to the solvent tank.



2 The system is pressurized throughout with the aid of an oil free diaphragm vacuum pump.



3 The solvent flows through an fast column where water and impurities are removed.



4 Next, through second column where oxygen is extracted.



(5) Finally, purified solvent can then be dispensed into flasks or channeled to a glove-box.



Stand Alone Model

● 1 Solvent System

For laboratory that is small or with limited space or where usage is low, we offer Stand Alone type.

This can fit into a draft chamber or at a corner of a fume hood.



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●3~6Solvent System Model

A standard one solvent system requires 2 columns and it can be expanded to 3 or 4 or 5 or 6 solvent system upwards.

Each Glass Contour system can be custom-built according to your requirement.

It can be a stand-alone system or built into fume hood or connecting to glove-box.

Accessory

- Keg Cabinet
- Take-off Flask (Glassware) SDS-1 Model
- 20L Keg

Solvent Keg



Take-off Flask





SIZE

	W	D	Н
1Solvent	325	450	1020
3Solvent	740	600	1950
4Solvent	920	600	1950
5solvent	1100	600	1950
6Solvent	1280	600	1950

Unit: mm

SOLVENT

●THF	●Toluene	● DCM
●Diethyl ether	●Hexane	●DMF
●1.4-dioxane	● Acetonitrile	● DME
● Chloroform	●IPA	■Cyclohexane
●Pentane	●m-xylene	●Ethyl acetate

[※]その他の溶媒に関しましてはご相談ください。

MOISTURE TESTS USING KARL FISCHER TITRATION

Solvent: THF		
Weight of sample(g)	μg H₂O	%H₂O
1.0641	7.5	0.0007
0.8066	0	0
0.8220	8.9	0.0011
0.8010	9.0	0.0011
AVERAGE=0.0007%H ₂ O		

Solvent: Toluene			
Weight of sample(g)	μg H₂O	%H₂O	
1.7248	0	0	
1.7321	0	0	
1.7344	0	0	

Solvent: DCM			
Weight of sample(g)	μg H₂O	%H₂O	
2.6625	0	0	
2.6307	0	0	
2.6523	0	0	

Solvent: Diethyl ether		
Weight of sample(g)	μg H₂O	%H₂O
0.5318	0	0
0.8842	6.4	0.0007
0.8123	0	0
0.7555	0	0
AVERAGE=0.0002%H ₂ O		

Solvent:Hexane			
Weight of sample(g)	μg H₂O	%H₂O	
0.6820	0	0	
0.8255	0	0	
0.9266	0	0	

Solvent: DMF			
Weight of sample(g)	μg H₂O	%H₂O	
0.8921	31.2	0.0035	
0.8646	15.1	0.0017	
0.8506	29.6	0.0035	
0.7881	26.2	0.0033	
AVFRAGE=0.0040%H ₃ O			

Solvent : Acetonitrile		
Weight of sample(g)	μg H₂O	%H₂O
0.6717	8	0.0012
0.7966	10.4	0.0013
0.7443	8.1	0.0011

Solvent: DME			
Weight of sample(g)	μg H₂O	%H₂O	
1.1746	0.5	0.00004	
0.9416	0	0	
0.7916	0	0	
0.9807	0	0	

This product is being distributed by

For inquiries, please contact

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