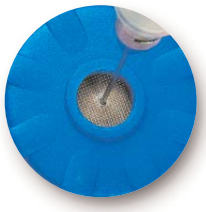
DriSolv®

Anhydrous Solvents for Organic Synthesis

EMD

EMD Chemicals



EMD Chemicals is a recognized leader in the production of high purity solvents, and we use that knowledge to produce the highest quality anhydrous solvents. With a water content as low as 10 ppm for some solvents, our **Dri**Solv® solvents line will provide you with a reliable basis for your water critical synthesis and research work.

All **Dri**Solv® solvents are packed under nitrogen and sealed with our Pureseal® septa, which ensures that the solvents stay dry during use. These unique septa have been designed to reseal after every use, and are chemically inert, even resistant to THF. The large surface area enables access for more than one cannula and multiple reclosing options, making it easy for you to deliver the driest solvents to your reaction vessels.

In addition to the standard 100ml and 1L bottles for laboratory use, our **Dri**Solv® solvents are available in stainless steel EM ReCycler® containers in sizes from 18.9L to 1,250L.

All EMD Chemicals products are available through our network of North American distributors. Visit our web site www.emdchemicals.com to learn more about us and the products we offer.

Our Customer Service and Technical Support Representatives are available Monday through Friday from 8:30 a.m. to 5:00 p.m. EST at our toll-free number 1-800-222-0342.

Not Your Ordinary Bottle Cap!

*Our unique tiered cap and Pureseal™ septum keep the **Dri**Solv® solvent inside dry from the first puncture to the last.*

All the elements are made from chemically inert materials, and the septum material is resistant to tearing and coring. This eliminates worry about plugged syringes and minimizes air entering during puncture. There is also a large septum surface area which allows access for two cannulas.

Acetonitrile, DriSolv®

Methyl cyanide

CH_3CN

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 1
Water, ppm ..... ≤ 50

Item	Size	Price
AX0143-6	1L	$43.98
	6 x 1L	$211.14
AX0143-7	100 ml	$26.84
	6 x 100 ml	$128.82

Alcohol, denatured ethyl alcohol, DriSolv®

CH_3CH_2OH

Specifications:

Appearance.....clear, free from particulates
Assay (GC), %.....Ethanol 89.5 - 91.5%
Methanol 3.5 - 5.5%
Isopropanol 4.0 - 6.0%
Color (APHA)..... ≤ 10
Residue after evaporation, ppm..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
AX0447-6	1L	$32.75
	6 x 1L	$157.20
AX0447-7	100 ml	$23.85
	6 x 1L	$114.48

Benzene, DriSolv®

C_6H_6

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 30

Item	Size	Price
BX0214-6	1L	$37.50
	6 x 1L	$179.94
BX0214-7	100 ml	$27.03
	6 x 100 ml	$129.78

Chloroform, DriSolv®

Trichloromethane

Stabilized with ~ 1% ethanol

$CHCl_3$

Specifications:

Appearance.....clear, free from particulates
Assay ($CHCl_3$ + C_2H_5OH, GC), %..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm..... ≤1
Water, ppm ..... ≤ 50

Item	Size	Price
CX1056-6	1L	$34.72
	6 x 1L	$166.80
CX1056-7	100 ml	$23.83
	6 x 100 ml	$114.30

Chloroform, DriSolv®

Trichloromethane

Stabilized with ~ 200ppm alkene

$CHCl_3$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), %..... ≥ 99
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 3
Water, ppm ..... ≤ 50

Item	Size	Price
CX1057-6	1L	$35.17
	6 x 1L	$168.84
CX1057-7	100 ml	$24.20
	6 x 1L	$116.10

Cyclohexane, DriSolv®

C_6H_{12}

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.5
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
CX2284-6	1L	$36.57
	6 x 1L	$175.56

1,2-Dichlorobenzene, DriSolv®

$C_6H_4Cl_2$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), %..... ≥ 99
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 3
Water, ppm ..... ≤ 50

Item	Size	Price
DX0682-6	1L	$54.10
	6 x 1L	$259.62

1,2-Dichloroethane, DriSolv®

Ethylene dichloride

CH_2ClCH_2Cl

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 3
Water, ppm ..... ≤ 50

Item	Size	Price
DX0794-6	1L	$55.83
	6 x 1L	$268.02
DX0794-7	100 ml	$30.96
	6 x 100 ml	$148.62

Dichloromethane, DriSolv®

Methylene chloride

CH_2Cl_2

Stabilized with an alkene

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 1
Water, ppm ..... ≤ 50

Item	Size	Price
DX0834-6	1L	$33.87
	6 x 1L	$162.54
DX0834-7	100 ml	$21.79
	6 x 100 ml	$104.58

1,2-Dimethoxyethane, DriSolv®

Ethylene glycol dimethyl ether, Dimethyl glycol

$CH_3OCH_2CH_2OCH_3$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.5
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
DX1531-6	1L	$74.37
	6 x 1L	$357.00

N,N-Dimethylacetamide, DriSolv®

Acetic acid dimethylamide

$CH_3CON(CH_3)_2$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 10
Water, ppm ..... ≤ 50

Item	Size	Price
DX1544-6	1L	$55.34
	6 x 1L	$265.68

N,N-Dimethylformamide, DriSolv®

Formic acid dimethylamide

$HCON(CH_3)_2$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
DX1727-6	1L	$46.90
	6 x 1L	$225.12
DX1727-7	100 ml	$27.41
	6 x 100 ml	$131.58

p-Dioxane, DriSolv®

$C_4H_8O_2$

Unstabilized

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.9
Color (APHA)..... ≤ 10
Peroxide, ppm..... ≤2 (at time of filling)
Residue after evaporation, ppm..... ≤5
Water, ppm ..... ≤ 50

Item	Size	Price
DX2092-6	1L	$48.25
	6 x 1L	$231.60
DX2092-7	100 ml	$30.75
	6 x 1L	$147.60

Ethyl Acetate, DriSolv®

$CH_3COOC_2H_5$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), %..... ≥ 99.9
Color (APHA)..... ≤ 10
Residue after evaporation, ppm ..... ≤1
Water, ppm ..... ≤ 50

Item	Size	Price
EX0237-6	1L	$36.50
	6 x 1L	$175.20
EX0237-7	100 ml	$26.50
	6 x 100ml	$127.20

Ethyl Ether, DriSolv®

$(CH_3CH_2)_2O$

Stabilized with ~ 1ppm BHT

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Peroxide, ppm ..... ≤ 1
Evaporation residue, ppm ..... ≤ 3
Water, ppm ..... ≤ 50

Item	Size	Price
EX0194-6	1L	$37.45
	6 x 1L	$179.76
EX0194-7	100 ml	$24.62
	6 x 100 ml	$118.26

n-Hexane, 95%, DriSolv®

C_6H_{14}

Specifications:

Appearance.....clear, free from particulates
Assay (n-Hexane) (GC), %..... ≥ 95
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 3
Water, ppm ..... ≤ 50

Item	Size	Price
HX0304-6	1L	$43.76
	6 x 1L	$210.00
HX0304-7	100 ml	$28.23
	6 x 100 ml	$135.48

Isopropyl Alcohol, DriSolv®

$CH_3CHOHCH_3$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), %..... ≥99.9
Color (APHA) ..... ≤10
Residue after evaporation, ppm ..... ≤1
Water, ppm..... ≤50

Item	Size	Price
PX1827-6	1L	$41.75
	6 x 1L	$200.40
PX1827-7	100 ml	$28.50
	6 x 1L	$136.80

All prices in US dollars.

Methanol, DriSolv®

Methyl alcohol

CH_3OH

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 1
Water, ppm ..... ≤ 50

Item	Size	Price
MX0472-6	1L	$28.77
	6 x 1L	$138.12
MX0472-7	100 ml	$32.07
	6 x 100 ml	$153.96

Methyl Sulfoxide, DriSolv®

Dimethyl sulfoxide

$(CH_3)_2SO$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
MX1457-6	1L	$69.03
	6 x 1L	$331.38
MX1457-7	100 ml	$32.02
	6 x 100 ml	$153.78

Methyl tert-Butyl Ether, DriSolv®

$CH_3OC(CH_3)_3$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
MX0824-7	100 ml	$27.69
	6 x 100 ml	$132.90

Pentane, DriSolv®

C_5H_{12}

Specifications:

Appearance.....clear, free from particulates
Assay (GC), %..... ≥ 99
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 3
Water, ppm ..... ≤ 50

Item	Size	Price
PX0171-6	1L	$36.41
	6 x 1L	$174.72
PX0171-7	100 ml	$21.79
	6 x 100 ml	$104.58

Pyridine, DriSolv®

C_5H_5N

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
PX2012-6	1L	$92.62
	6 x 1L	$444.72
PX2012-7	100 ml	$41.75
	6 x 100 ml	$200.46

Tetrahydrofuran, DriSolv®

Unstabilized

C_4H_8O

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.9
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
UV cutoff, nm ..... ≤ 212
Water, ppm ..... ≤ 50

Item	Size	Price
TX0277-6	1L	$49.98
	6 x 1L	$239.94
TX0277-7	100 ml	$29.27
	6 x 100 ml	$140.52

Tetrahydrofuran, DriSolv®

Stabilized with ~ 25 ppm BHT

C_4H_8O

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.9
Color (APHA)..... ≤ 10
Water, ppm ..... ≤ 50

Item	Size	Price
TX0284-6	1L	$54.63
	6 x 1L	$262.20
TX0284-7	100 ml	$27.90
	6 x 100 ml	$133.86

Toluene, DriSolv®

Methylbenzene

$C_6H_5CH_3$

Specifications:

Appearance.....clear, free from particulates
Assay (GC), % ..... ≥ 99.8
Color (APHA)..... ≤ 10
Evaporation residue, ppm ..... ≤ 5
Water, ppm ..... ≤ 50

Item	Size	Price
TX0732-6	1L	$26.53
	6 x 1L	$127.32
TX0732-7	100 ml	$21.48
	6 x 100 ml	$103.08

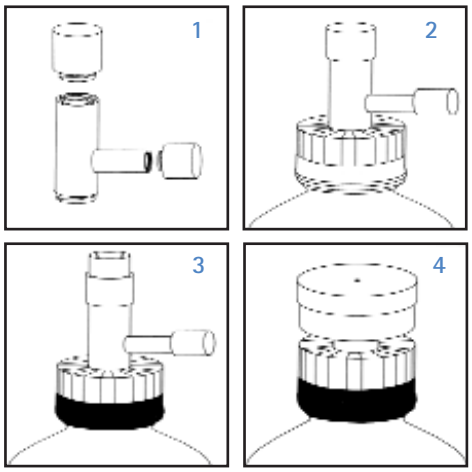
DriSolv® Solvent Bottle Accessories

1. Elbow adapter for use with nitrogen purge. Supplied with plugs and secondary septa to reseal after use. Available as item #692004-2. Replacement plug for bottle top available as item #692012-2.

2. Elbow adapter threaded into bottle cap.

3. Elbow adapter shown with secondary septum, six supplied with item #692004-2. Secondary replacement septa available as item #692004S-2.

4. Drying tube to maintain low moisture level inside the bottle when removing solvent without inert gas flow. Available as item #692010-2.



ELBOW ADAPTER with SEPTUM CAP

For solvent withdrawal under nitrogen purge. Secondary septum cap reduces leakage after primary septum has been punctured.

Item	Size	Price
692004-2	1 unit	$22.00

SECONDARY REPLACEMENT SEPTA

Pack of ten replacement septa, for use with elbow adapter

Item	Size	Price
692004S-2	1 pkg	$18.52

DRYING TUBE

Supplied with 250 g of t.h.e.® desiccant, 100% indicating silica gel item #DX0017 to maintain low moisture content when withdrawing solvent. Other Drying Agents can be used as desired.

Item	Size	Price
692010-2	1 unit	$52.45

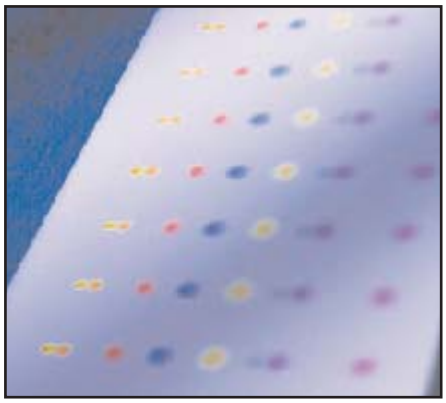
LARGE PLUG

Replacement plug for bottle top

Item	Size	Price
692012-2	1 unit	$9.96

All prices in US dollars.

TLC Plates from EMD Chemicals



EMD Chemicals offers a complete line of TLC plates to complement your work. Choose from the best that Merck KGaA, Darmstadt, Germany, has to offer as a leader in silica and TLC products.

Choose the TLC Plate that sets the standard...Never settle for less!

- Highly purified Silica Gel eliminates contamination of your samples.
- Narrow particle size range reduces band-spreading.
- Uniform layer thickness minimizes diffusion and enhances recovery of minute fractions.
- High volume production eliminates the variability often associated with manually-produced plates offered by small-volume manufacturers.
- Silica Gel on plastic or aluminum foil provides the same high quality TLC surface but allows you to cut the plate to the desired size to economize.
- Merck KGaA has produced sorbents for chromatography for 100 years, and was the first manufacturer of usable layers on glass plates.
- Eliminate the tedium and potential hazard of cutting TLC plates with pre-cut (2.5 x 7.5cm) TLC plates from EMD Chemicals.

Precoated TLC Glass Plates

Cat. No.	Description	Layer Thickness (mm)	Size (cm)	Plates/ Carton	Suggested List Price
Silica Gel					
15341-5	Silica gel 60 F_{254}	0.25	2.5 x 7.5	500	661.13
15341-1	Silica gel 60 F_{254}	0.25	2.5 x 7.5	100	149.90
15327-1	Silica gel 60 F_{254}	0.25	2.5 x 7.5	100	204.53
15326-1	Silica gel 60	0.25	2.5 x 7.5	100	198.57
5715-7	Silica gel 60 F_{254}	0.25	20 x 20	25	146.10
5719-2	Silica gel 60 F_{254}	0.25	5 x 10	200	321.23
5729-6	Silica gel 60 F_{254}	0.25	10 x 20	50	204.53
5714-3	Silica gel 60 F_{254}	0.25	5 x 20	100	233.72
5721-7	Silica gel 60	0.25	20 x 20	25	146.10
5626-6	Silica gel 60	0.25	10 x 20	50	204.38

NEW LuxPlates, High Fluorescence TLC Plates

Cat. No.	Description	Layer Thickness (mm)	Size (cm)	Plates/ Carton	Suggested List Price
Silica Gel					
5801-1	Silica gel 60 F_{254}	0.25	2.5 x 7.5	100	218.80
5802-1	Silica gel 60 F_{254}	0.25	5 x 10	25	93.41
5803-1	Silica gel 60 F_{254}	0.25	5 x 20	100	279.98
5804-1	Silica gel 60 F_{254}	0.25	10 x 20	50	218.80
5805-1	Silica gel 60 F_{254}	0.25	20 x 20	25	169.90

Additional Types and Sizes of TLC Plates

Silica Gel (prescored 5 x 20cm)					
5608-7	Silica gel 60 F_{254}	0.25	20 x 20	20	192.77
Silica Gel (preconcentration zone 2.5cm)					
11798-7	Silica gel 60 F_{254}	0.25	20 x 20	25	204.53
Reversed Phase (RP) Silica Gel					
15424-6	RP-8 F_{254s}	0.25	10 x 20	50	584.97
15389-7	RP-18 F_{254s}	0.25	20 x 20	25	475.29
Aluminum Oxide (Basic)					
5713-7	Aluminum oxide 60 F_{254}	0.25	20 x 20	25	262.88
Cellulose					
5716-7	Cellulose	0.1	20 x 20	25	282.39

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