

Sample Extraction Needle
NeedlEx

NeedlEx
Needle Extraction

NeedlEx Selection Guide



(Alphabetical order)

Compound name	Boiling point (degrees Celsius)	For alcohols	For organic solvents	For fatty acids	For amines
Acetic Acid	118.0	⊙	○	⊙	—
Acetaldehyde	20.2	⊙	—	—	—
Acetone	56.5	⊙	×	—	—
Acetonitrile	82.0	⊙	×	×	—
Acrolein	53.0	⊙	×	×	—
Acrylic Acid	139.0	—	⊙	⊙	—
Acrylonitrile	77.0	⊙	×	×	—
Allyl Alcohol	97.0	⊙	○	△	—
Ammonia	-33.3	—	—	—	⊙
iso-Amyl Acetate	142.0	—	⊙	⊙	—
n-Amyl Acetate	149.0	—	⊙	⊙	—
iso-Amyl Alcohol	130.0	⊙	⊙	⊙	—
n-Amyl Alcohol	137.5	⊙	⊙	⊙	—
Benzene	80.0	⊙	×	×	—
Benzyl Alcohol	205.0	—	—	⊙	—
1,3-Butadiene	-4.4	⊙	—	—	—
iso-Butane	-12.0	⊙	—	—	—
n-Butane	-0.5	⊙	—	—	—
2-Butanol	99.0	⊙	⊙	○	—
iso-Butanol	108.0	⊙	⊙	⊙	—
1-Butanol	117.0	⊙	⊙	⊙	—
iso-Butene	-6.9	⊙	—	—	—
1-Butene	-6.3	⊙	—	—	—
trans-2-Butene	0.9	⊙	—	—	—
cis-2-Butene	3.7	⊙	—	—	—
iso-Butyl Acetate	118.0	⊙	⊙	⊙	—
n-Butyl Acetate	126.0	⊙	⊙	⊙	—
iso-Butyl Aldehyde	62.0	⊙	△	△	—
n-Butyl Aldehyde	85.0	⊙	○	○	—
Butyl Cellosolve	172.0	—	⊙	⊙	—
iso-Butyric Acid	154.0	—	—	⊙	—
n-Butyric Acid	164.0	—	—	⊙	—
iso-Caproic Acid	199.0	—	—	⊙	—
n-Caproic Acid	205.0	—	—	⊙	—
Carbon Tetrachloride	76.8	⊙	—	—	—
Cellosolve	135.0	⊙	⊙	⊙	—
Cellosolve Acetate	156.0	—	⊙	⊙	—
Chlorobenzene	131.0	—	⊙	⊙	—
Chloroform	61.2	⊙	×	×	—
o-Cresol	191.0	—	—	⊙	—
p-Cresol	202.0	—	—	⊙	—
m-Cresol	202.0	—	—	⊙	—
Crotonaldehyde	100.0	⊙	○	○	—
Cyclohexane	81.0	⊙	×	×	—
Cyclohexanol	161.0	—	⊙	⊙	—
Cyclohexanone	155.7	—	⊙	⊙	—
Cyclohexene	83.0	⊙	×	×	—
Cyclopentane	49.3	⊙	—	—	—
n-Decane	174.2	—	⊙	⊙	—
m-Dichlorobenzene	173.0	—	⊙	⊙	—
p-Dichlorobenzene	174.0	—	⊙	⊙	—
o-Dichlorobenzene	180.5	—	⊙	⊙	—
1,1-Dichloroethane	57.0	⊙	×	×	—

Concentration ratios: ⊙ Greater than 100 times, ○ 50 to 100 times, △ 20 to 50 times, × 10 to 20 times, — less than ten times or not confirmed

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1,2-Dichloroethane	84.0	⊙	△	△	—
1,1-Dichloroethylene	32.0	⊙	—	—	—
trans-1,2-Dichloroethylene	48.0	⊙	—	—	—
cis-1,2-Dichloroethylene	61.0	⊙	×	×	—
Dichloromethane	40.0	⊙	—	—	—
Diethyl Ether	35.0	⊙	—	—	—
Diisopropyl Ether	69.0	⊙	△	△	—
Dimethyl Ether	-23.6	⊙	—	—	—
N,N-Dimethyl Formamide	153.0	—	⊙	—	—
Dimethylamine	6.9	×	×	—	⊙
1,4-Dioxane	101.0	⊙	⊙	○	—
Ethane	-89.0	—	—	—	—
Ethanol	78.4	⊙	○	△	—
Ethyl Acetate	77.1	⊙	○	×	—
Ethyl Acrylate	99.0	⊙	○	○	—
Ethyl Cellosolve	124.5	⊙	⊙	⊙	—
Ethyl tert-Butyl Ether	73.0	⊙	△	△	—
Ethylbenzene	136.0	⊙	⊙	⊙	—
Ethylene	-104.0	—	—	—	—
Ethylene Oxide	10.7	⊙	—	—	—
Formaldehyde	-19.3	○	—	—	—
Formic Acid	100.7	⊙	○	⊙	—
Furfural	161.7	—	⊙	⊙	—
Glycidol	167.0	—	⊙	⊙	—
n-Heptane	98.0	⊙	×	△	—
n-Hexane	69.0	⊙	—	×	—
Isoprene	34.0	⊙	—	—	—
Methacrolein	69.0	⊙	△	△	—
Methacrylic Acid	159.0	—	⊙	⊙	—
Methane	-161.6	—	—	—	—
Methanol	64.7	○	—	—	—
Methyl Acetate	56.9	⊙	×	—	—
Methyl Acrylate	80.0	⊙	△	△	—
Methyl Ethyl Ketone	79.5	⊙	○	△	—
Methyl Formate	32.0	⊙	—	—	—
Methyl iso-Butyl Ketone	116.0	⊙	⊙	⊙	—
Methyl Methacrylate	101.0	⊙	○	○	—
Methyl n-Butyl Ketone	127.0	⊙	⊙	⊙	—
Methyl tert-Butyl Ether	55.2	⊙	×	×	—
Methylamine	-6.0	×	×	—	⊙
Methylcyclohexane	101.0	⊙	⊙	⊙	—
2-Methylcyclohexanol	167.0	—	⊙	—	—
4-Methylcyclohexanol	174.0	—	⊙	—	—
3-Methylcyclohexanol	175.0	—	⊙	—	—
2-Methylcyclohexanone	165.0	—	⊙	—	—
3-Methylcyclohexanone	169.0	—	⊙	—	—
4-Methylcyclohexanone	169.0	—	⊙	—	—
n-Nonane	150.0	—	⊙	⊙	—
n-Octane	125.0	—	⊙	⊙	—
iso-Pentane	28.0	⊙	—	—	—
n-Pentane	36.0	⊙	—	—	—
Phenol	181.7	—	—	⊙	—
Propane	-42.0	⊙	—	—	—

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Compound name	Boiling point (degrees Celsius)	For alcohols	For organic solvents	For fatty acids	For amines
2-Propanol	82.4	◎	△	△	—
1-Propanol	97.2	◎	○	△	—
Propionaldehyde	48.0	◎	×	×	—
Propionic Acid	141.0	—	—	◎	—
Propionitrile	96.0	◎	△	△	—
iso-Propyl Acetate	89.0	◎	○	○	—
n-Propyl Acetate	96.6	◎	◎	○	—
Propylene	-47.4	◎	—	—	—
Propylene Oxide	34.0	◎	—	—	—
Styrene	145.0	◎	◎	◎	—
tert-Butanol	82.0	◎	○	△	—
1,1,2,2-Tetrachloroethane	147.0	—	◎	◎	—
Tetrachloroethylene	121.0	◎	◎	◎	—
Tetrahydrofuran	72.0	◎	△	△	—
Toluene	110.6	◎	◎	◎	—
1,1,1-Trichloroethane	74.0	◎	×	×	—
Trichloroethylene	87.0	◎	×	×	—
Trimethylamine	2.9	△	×	—	◎
iso-Valeric Acid	175.0	—	—	◎	—
n-Valeric Acid	186.0	—	—	◎	—
Vinyl Acetate	72.0	◎	△	×	—
Vinyl Chloride	-13.0	◎	—	—	—
Water	100.0	○	—	—	×
p-Xylene	138.0	◎	◎	◎	—
m-Xylene	139.0	◎	◎	◎	—
o-Xylene	144.0	◎	◎	◎	—

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