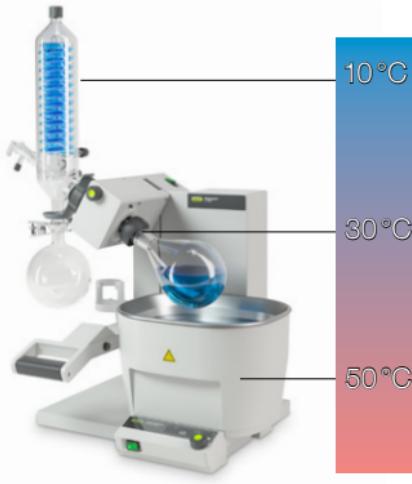


## Increase your distillation efficiency

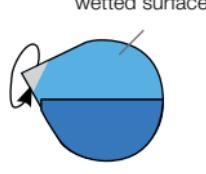
The following tips help you improve the efficiency of your evaporation process, to save time, to conserve energy and to reduce the environmental impact.

### Δ 20 °C rule - 10/30/50 °C



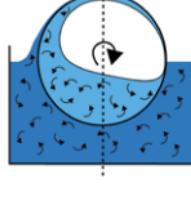
1. Set heating bath temperature 50 °C
2. Cooling water temperature 10 °C or lower
3. Adjust needed vacuum for a boiling point of 30 °C according to the list of solvents

### Immersion angle



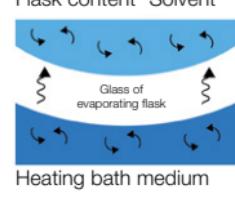
Use standard position (25 °) for best efficiency without jeopardizing the sample

### Rotation speed



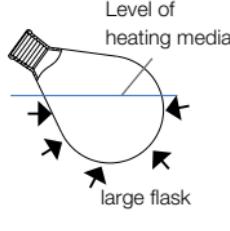
Use 250 to 280 rpm for maximum turbulence at high durability

### Flask thickness



Use 1.8 mm thick flasks (1 L) for best temperature exchange at high safety

### Flask sizes



Select a flask that accommodates approximately twice the starting sample volume

Download the comprehensive evaporation guide white papers:

[www.buchi.com/application](http://www.buchi.com/application)



# List of Solvents

## Evaporation

Solvent	Formula	Vacuum*
Acetic acid	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	26
Acetone	C <sub>3</sub> H <sub>6</sub> O	370
Acetonitrile	C <sub>2</sub> H <sub>3</sub> N	153
Benzene	C <sub>6</sub> H <sub>6</sub>	162
<i>n</i> -Amylalcohol, <i>n</i> -pentanol	C <sub>5</sub> H <sub>12</sub> O	6
<i>n</i> -Butanol	C <sub>4</sub> H <sub>10</sub> O	14
<i>tert</i> -Butanol, 2-methyl-2-propanol	C <sub>4</sub> H <sub>10</sub> O	78
Chlorobenzene	C <sub>6</sub> H <sub>5</sub> Cl	22
Chloroform	CHCl <sub>3</sub>	332
Cyclohexane	C <sub>6</sub> H <sub>12</sub>	154
Dichloromethane, methylene chloride	CH <sub>2</sub> Cl <sub>2</sub>	699
Diethylether	C <sub>4</sub> H <sub>10</sub> O	838
<i>trans</i> -1,2-Dichloroethylene	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	317
Diisopropylether	C <sub>6</sub> H <sub>14</sub> O	251
Dioxane	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	68
Dimethylformamide (DMF)	C <sub>3</sub> H <sub>7</sub> NO	6
Ethanol	C <sub>2</sub> H <sub>6</sub> O	97
Ethylacetate	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	153
Heptane	C <sub>7</sub> H <sub>16</sub>	77
Hexane	C <sub>6</sub> H <sub>14</sub>	264
Isopropyl alcohol	C <sub>3</sub> H <sub>8</sub> O	78
Isoamyl alcohol	C <sub>5</sub> H <sub>12</sub> O	9
Methanol	CH <sub>4</sub> O	218
Pentane	C <sub>5</sub> H <sub>12</sub>	834
Propionic acid	C <sub>3</sub> H <sub>6</sub> O	8
<i>n</i> -Propylalcohol	C <sub>3</sub> H <sub>8</sub> O	37
Pentachloroethane	C <sub>2</sub> HCl <sub>5</sub>	8
1,1, 2,2-Tetrachloroethane	C <sub>2</sub> H <sub>2</sub> Cl <sub>4</sub>	16
1,1,1-Trichloroethane	C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>	204
Tetrachloromethane	CCl <sub>4</sub>	179
Tetrahydrofurane (THF)	C <sub>4</sub> H <sub>8</sub> O	249
Toluene	C <sub>7</sub> H <sub>8</sub>	48
Trichloroethylene	C <sub>2</sub> HCl <sub>3</sub>	119
Water	H <sub>2</sub> O	42
Xylene	C <sub>8</sub> H <sub>10</sub>	15

\*Pressure in mbar for boiling point at 30 °C (heating bath 50 °C)

