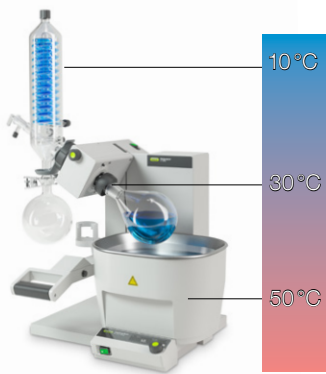


# Increase your distillation efficiency

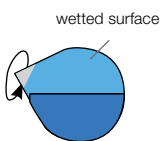
The following tips help you improve the efficiency of your evaporation process, to save time, to conserve energy and to reduce the environmental impact.

## $\Delta 20\text{ }^{\circ}\text{C}$ rule - 10/30/50 $^{\circ}\text{C}$



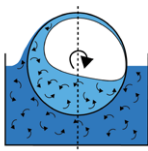
1. Set heating bath temperature 50  $^{\circ}\text{C}$
2. Cooling water temperature 10  $^{\circ}\text{C}$  or lower
3. Adjust needed vacuum for a boiling point of 30  $^{\circ}\text{C}$  according to the list of solvents

## Immersion angle



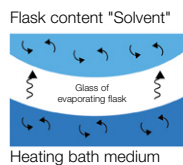
Use standard position (25  $^{\circ}$ ) for best efficiency without jeopardizing the sample

## Rotation speed



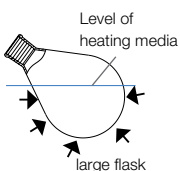
Use 250 to 280 rpm for maximum turbulence at high durability

## 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)



Solvent	Formula	Vacuum*
Acetic acid	$C_2H_4O_2$	26
Acetone	$C_3H_6O$	370
Acetonitrile	$C_2H_3N$	153
Benzene	$C_6H_6$	162
<i>n</i> -Amyl alcohol, <i>n</i> -pentanol	$C_5H_{12}O$	6
<i>n</i> -Butanol	$C_4H_{10}O$	14
<i>tert</i> -Butanol, 2-methyl-2-propanol	$C_4H_{10}O$	78
Chlorobenzene	$C_6H_5Cl$	22
Chloroform	$CHCl_3$	332
Cyclohexane	$C_6H_{12}$	154
Dichloromethane, methylene chloride	$CH_2Cl_2$	699
Diethylether	$C_4H_{10}O$	838
<i>trans</i> -1,2-Dichloroethylene	$C_2H_2Cl_2$	317
Diisopropylether	$C_6H_{14}O$	251
Dioxane	$C_4H_8O_2$	68
Dimethylformamide (DMF)	$C_3H_7NO$	6
Ethanol	$C_2H_6O$	97
Ethylacetate	$C_4H_8O_2$	153
Heptane	$C_7H_{16}$	77
Hexane	$C_6H_{14}$	264
Isopropyl alcohol	$C_3H_8O$	78
Isoamyl alcohol	$C_5H_{12}O$	9
Methanol	$CH_4O$	218
Pentane	$C_5H_{12}$	834
Propionic acid	$C_3H_6O$	8
<i>n</i> -Propylalcohol	$C_3H_8O$	37
Pentachloroethane	$C_2HCl_5$	8
1,1, 2,2-Tetrachloroethane	$C_2H_2Cl_4$	16
1,1,1-Trichloroethane	$C_2H_3Cl_3$	204
Tetrachloromethane	$CCl_4$	179
Tetrahydrofurane (THF)	$C_4H_8O$	249
Toluene	$C_7H_8$	48
Trichloroethylene	$C_2HCl_3$	119
Water	$H_2O$	42
Xylene	$C_8H_{10}$	15

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

