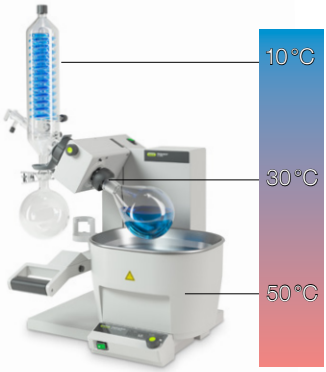
Increase your distillation efficiency

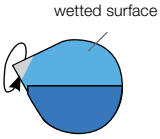
The following tips help you improve the efficiency of your evaporation process, to save time, to conserve energy and to reduce the environmental impact.

Δ 20 °C rule - 10/30/50 °C



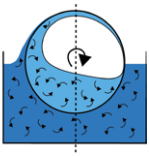
1. Set heating bath temperature 50 °C
2. Cooling water temperature 10 °C or lower
3. Adjust needed vacuum for a boiling point of 30 °C according to the list of solvents

Immersion angle



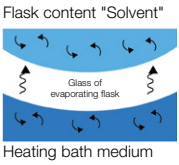
Use standard position (25 °) for best efficiency without jeopardizing the sample

Rotation speed



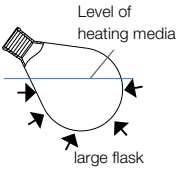
Use 250 to 280 rpm for maximum turbulence at high durability

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

List of Solvents
Evaporation

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
n-Amylalcohol, *n*-pentanol	$C_5H_{12}O$	6
n-Butanol	$C_4H_{10}O$	14
tert-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
trans-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
n-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)

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Quality in your hands

094141 en 1508/Technical Data subject to alterations/Quality System ISO 9001