

# Doppelbock

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- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **31**
- SRM **20.9**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **120 min**
- Evaporation rate **7 %/h**
- Boil size **15.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **15.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	3 kg (52.2%)	80 %	16
Grain	Vienna Malt	2 kg (34.8%)	78 %	8
Grain	Weyermann Caramunich 3	0.25 kg (4.3%)	76 %	150
Grain	Special B Castle	0.25 kg (4.3%)	70 %	350
Grain	Melanoiden Malt	0.25 kg (4.3%)	80 %	39

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	25 g	60 min	7.1 %
Boil	Perle	15 g	20 min	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 2633 Octoberfest Lager Blend	Lager	Slant	250 ml	Wyeast Labs