

Rauchdoppelbock

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **31**
- SRM **24.2**
- 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 **16.4 liter(s)**
- Total mash volume **21.8 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 **16.4 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 **4.8 liter(s)** of **76C** water or to achieve **15.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Smoked Malt	2.2 kg (40.4%)	81 %	6
Grain	Monachijski Ciemny Steinbach	1.5 kg (27.5%)	80 %	25
Grain	Vienna Malt	1 kg (18.3%)	78 %	8
Grain	Weyermann Caramunich 3	0.25 kg (4.6%)	76 %	150
Grain	Special B Castle	0.25 kg (4.6%)	70 %	350
Grain	Briess - Extra Special Malt	0.25 kg (4.6%)	73 %	256

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.6 %
Boil	Marynka	10 g	0 min	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	150 ml	Fermentis