

Rauch doppelbock

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **21**
- SRM **19.2**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **57.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **47.4 liter(s)**
- Total mash volume **63.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **10 min**
- Temp **72 C**, Time **50 min**

Mash step by step

- Heat up **47.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **10 min** at **67C**
- Keep mash **50 min** at **72C**
- Sparge using **26.2 liter(s)** of **76C** water or to achieve **57.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (25.3%)	81 %	4
Grain	Monachijski	3 kg (19%)	80 %	16
Grain	Wędzony bukiem Viking Malt	5 kg (31.6%)	82 %	10
Grain	Strzegom Pilzneński (wędzony na bączowce)	1 kg (6.3%)	80 %	4
Grain	Pale caramel	0.5 kg (3.2%)	78 %	400
Grain	Special B Malt	1 kg (6.3%)	65.2 %	315
Grain	Viking melanoidynowy	0.5 kg (3.2%)	75 %	60
Grain	Biscuit Malt	0.5 kg (3.2%)	79 %	45
Grain	Karmelowy Czerwony	0.3 kg (1.9%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Marynka	10 g	30 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gęstwa	Ale	Slant	500 ml	Browar Podgórz