

Rauch doppelbock

- Gravity **24 BLG**
- ABV **11 %**
- IBU **24**
- SRM **23**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **28.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony bukiem Viking Malt	6 kg (63.2%)	82 %	10
Grain	Monachijski Ciemny Steinbach	3 kg (31.6%)	100 %	30
Grain	Strzegom Czekoladowy jasny	0.25 kg (2.6%)	68 %	400
Grain	Strzegom Karmel 600	0.25 kg (2.6%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	50 g	60 min	4.5 %
Boil	Hallertau	25 g	40 min	4.5 %
Boil	Hallertau	25 g	10 min	4.5 %