

Radobok

- Gravity **22.5 BLG**
- ABV **10.2 %**
- IBU **26**
- SRM **19.5**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **47 C**, Time **20 min**
- Temp **63 C**, Time **15 min**
- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **51.5C**
- Add grains
- Keep mash **20 min** at **47C**
- Keep mash **15 min** at **63C**
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **4.5 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Wędzony Steinbach	5 kg (75.8%)	80 %	6
Grain	Viking Melanoidynowy	1 kg (15.2%)	75 %	70
Grain	Słód Caramunich Typ II Weyermann	0.4 kg (6.1%)	75 %	120
Grain	Special W	0.2 kg (3%)	75 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	30 g	90 min	7.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	300 ml	Fermentis