

Doppelbock

- Gravity **19.8 BLG**
- ABV ---
- IBU **21**
- SRM **18.3**
- 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 **2.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **18.2 liter(s)**

Steps

- Temp **68.5 C**, Time **60 min**

Mash step by step

- Heat up **13 liter(s)** of strike water to **78.2C**
- Add grains
- Keep mash **60 min** at **68.5C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Munich Malt	4.75 kg (91.5%)	80 %	18
Grain	Melanoiden Malt	0.22 kg (4.2%)	80 %	39
Grain	CaraMunich II	0.22 kg (4.2%)	74 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	40 g	60 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Liquid	2000 ml	Fermentis