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

Туре	Name	Amount	Yield	EBC
Grain	Munich Malt	4.75 kg <i>(91.5%)</i>	80 %	18
Grain	Melanoiden Malt	0.22 kg <i>(4.2%)</i>	80 %	39
Grain	CaraMunich II	0.22 kg <i>(4.2%)</i>	74 %	80

Hops

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

Yeasts

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