Doppelbock

- Gravity 23.3 BLG
- ABV **10.7** %
- IBU **26**
- SRM **27.6**
- Style Doppelbock

Batch size

- Expected quantity of finished beer 9 liter(s)
- Trub loss 5 %
- Size with trub loss 9.4 liter(s)
- Boil time 120 min
- Evaporation rate 20 %/h
- Boil size 14.4 liter(s)

Mash information

- Mash efficiency 55 %
- Liquor-to-grist ratio 2.5 liter(s) / kg
- Mash size 15 liter(s)
- Total mash volume 21 liter(s)

Steps

- Temp 64 C, Time 10 min
 Temp 99 C, Time 10 min
- Temp 68 C, Time 10 min
- Temp 99 C, Time 10 min
 Temp 72 C, Time 10 min
 Temp 99 C, Time 10 min
 Temp 78 C, Time 1 min

Mash step by step

- Heat up 15 liter(s) of strike water to 72.8C
- Add grains
- Keep mash 10 min at 64C
- Keep mash 10 min at 68C
- Keep mash 10 min at 72C
- Keep mash 1 min at 78C
- Keep mash 10 min at 99C
- Keep mash 10 min at 99C
- Keep mash 10 min at 99C
- Sparge using **5.4 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Soufflet Monach	4.5 kg <i>(75%)</i>	79 %	15
Grain	Melanoiden Malt	0.9 kg <i>(15%)</i>	80 %	80
Grain	Caramunich® typ I	0.45 kg <i>(7.5%)</i>	73 %	80
Grain	Special B Malt	0.15 kg <i>(2.5%)</i>	65.2 %	315

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	18 g	35 min	10.7 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Wyeast 2308 Munich Lager	Lager	Slant	300 ml	Wyeast