Hopsa sa

- Gravity 12.6 BLG
- ABV **5.1** %
- IBU **35**
- SRM **3.7**
- Style American Brown Ale

Batch size

- Expected quantity of finished beer 20 liter(s)
- Trub loss 5 %
- Size with trub loss 21 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 25.3 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 15 liter(s)
- Total mash volume 20 liter(s)

Steps

- Temp **61 C**, Time **10 min** Temp **71 C**, Time **45 min**
- Temp **75** C, Time **5** min

Mash step by step

- Heat up 15 liter(s) of strike water to 67.8C
- Add grains
- Keep mash 10 min at 61C
- Keep mash 45 min at 71C
- Keep mash 5 min at 75C
- Sparge using 15.3 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (100%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Boil	Lublin (Lubelski)	30 g	15 min	4 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis