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

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