

BP/PB

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **26**
- SRM **14.3**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (48.4%)	85 %	7
Grain	Colorado Honig	1 kg (16.1%)	79 %	6
Grain	Briess - Munich Malt 20L	1 kg (16.1%)	74 %	39
Grain	Simpsons - Crystal Rye	0.5 kg (8.1%)	73 %	177
Grain	Abbey Castle	0.5 kg (8.1%)	80 %	45
Sugar	Milk Sugar (Lactose)	0.2 kg (3.2%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kent Goldings	50 g	45 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	PB2	500 g	Boil	15 min

Flavor	Jagody?	500 g	Boil	15 min
Flavor	Jagody?	1000 g	Secondary	5 day(s)