

BPA 2010

- Gravity **13 BLG**
- ABV ---
- IBU **24**
- SRM **15.1**
- Style **Belgian Pale 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 **5 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.9 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**

Mash step by step

- Heat up **13.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2.5 kg (53.5%)	80 %	8
Grain	Strzegom Monachijski typ I	1 kg (21.4%)	79 %	25
Grain	Castle Abbey Malt	0.5 kg (10.7%)	75 %	45
Grain	Weyermann - Carabelge	0.4 kg (8.6%)	30 %	35
Grain	carmelowy	0.066 kg (1.4%)	75 %	600
Sugar	cukier	0.21 kg (4.5%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	11 g	55 min	13.5 %
Boil	Styrian Goldings	25 g	15 min	4.5 %