

American/English Pale Ale (nr 3)

- Gravity **12 BLG**
- ABV ---
- IBU **45**
- SRM **15.8**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.1 kg (46.7%)	79 %	6
Grain	Strzegom Monachijski typ II	2 kg (44.4%)	79 %	22
Grain	Caraaroma	0.2 kg (4.4%)	78 %	400
Grain	Carahell	0.2 kg (4.4%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	7 g	60 min	10 %
Boil	Mosaic	14 g	60 min	10 %
Boil	Mosaic	6 g	45 min	10 %
Boil	Centennial	7 g	45 min	10.5 %
Boil	Centennial	12 g	10 min	10.5 %
Boil	Cascade	12 g	10 min	6 %
Aroma (end of boil)	Centennial	7 g	0 min	10.5 %
Aroma (end of boil)	Cascade	10 g	0 min	6 %
Aroma (end of boil)	Mosaic	13 g	0 min	10 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	10 g	Gozdawa