pale ale 22/1

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **43**
- SRM **9.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **33.5 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **69 C**, Time **70 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **70 min** at **69C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **33.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg *(75.8%)*	80 %	5
Grain	Strzegom Pilzneński	1 kg *(15.2%)*	80 %	4
Grain	Karmelowy Jasny 30EBC	0.5 kg *(7.6%)*	75 %	30
Grain	Czekoladowy bestmalz	0.1 kg *(1.5%)*	68 %	900

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	13.5 %
Boil	perle uniwersalny	30 g	20 min	7 %
Aroma (end of boil)	Citra uniwersalny	30 g	1 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

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