Malinowe

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **22**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.5 kg *(41.7%)*	82 %	4
Grain	Viking Pale Ale malt	2.5 kg *(41.7%)*	80 %	5
Grain	Caramel Pale	0.5 kg *(8.3%)*	77 %	8
Grain	Strzegom Wiedeński	0.5 kg *(8.3%)*	79 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	25 g	60 min	7.8 %
Boil	Oktawia	25 g	5 min	7.8 %

Yeasts

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

Notes

- Dodatek smakowy na cichą fermentację:
  - 3x butelka 440 ml soku malinowego Trenczynek

  Refermentacja w butelkach z dodatkiem:
  - słodzika Cologran z Lidla (2 tabletki na butelkę 0,5 l)

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

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