OUT WINE

- Gravity **22.9 BLG**
- ABV **10.4 %**
- IBU **47**
- SRM **13.6**
- Style **American Barleywine**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **27.2 liter(s)**
- Total mash volume **34.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **27.2 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **0.4 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód owsiany Fawcett	3 kg *(37.5%)*	61 %	5
Grain	Viking Pale Ale malt	2.5 kg *(31.2%)*	80 %	5
Grain	Strzegom Monachijski typ I	1 kg *(12.5%)*	79 %	16
Grain	Viking Pale Ale malt	0.5 kg *(6.2%)*	80 %	5
Grain	Płatki owsiane	0.4 kg *(5%)*	60 %	3
Grain	Bestmalz Carmel Pils	0.3 kg *(3.7%)*	75 %	5
Adjunct	łuska ryżu	0.25 kg *(3.1%)*	1 %	0
Grain	Carafa III	0.06 kg *(0.7%)*	70 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	50 min	15.5 %
Boil	Warrior	30 g	10 min	15.5 %
Aroma (end of boil)	Chinook	25 g	1 min	13 %
Aroma (end of boil)	Mosaic	50 g	1 min	10 %
Dry Hop	citra	50 g	7 day(s)	10 %

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

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile