

## #11 Barley Wine

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- Gravity **23.3 BLG**
- ABV **10.7 %**
- IBU **87**
- SRM **10.4**
- Style **American Barleywine**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **180 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

### Steps

- Temp **63 C**, Time **30 min**
- Temp **67 C**, Time **60 min**
- Temp **74 C**, Time **30 min**

### Mash step by step

- Heat up **30 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **60 min** at **67C**
- Keep mash **30 min** at **74C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słodownia Strzegom - pale ale	8.7 kg (87%)	79 %	6
Grain	Słodownia Strzegom - wiedeński	1 kg (10%)	79 %	7
Grain	Castle Malting - Chateau - Crystal 150 EBC	0.3 kg (3%)	78 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	50 g	0 min	6.8 %
Boil	Chinook	50 g	60 min	12.8 %
Boil	Amarillo	50 g	10 min	8.8 %
Boil	Centennial	50 g	30 min	9.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 - Amerykański Sen	Ale	Liquid	300 ml	Fermentum Mobile