

# BARLEYWINE v4 #111

- Gravity **22.9 BLG**
- ABV **10.4 %**
- IBU **88**
- SRM **12.7**
- Style **American Barleywine**

## Batch size

- Expected quantity of finished beer **15.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.3 liter(s)**
- Boil time **120 min**
- Evaporation rate **20 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **65.2 %**
- Liquor-to-grist ratio **2.59 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **27.7 liter(s)**

## Steps

- Temp **64 C**, Time **70 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **7 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **7 min** at **76C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep©Ale	6 kg (77.6%)	82.1 %	6
Grain	Viking - żytni	0.328 kg (4.2%)	81 %	8
Grain	Viking - wiedeński	0.8 kg (10.4%)	79 %	8.6
Grain	Viking - cookie	0.4 kg (5.2%)	72 %	50
Grain	Chateau - cara gold	0.1 kg (1.3%)	78 %	120
Grain	Viking - karmelowy 300	0.1 kg (1.3%)	73 %	300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	11.5 %
Boil	Columbus	34.1 g	30 min	12.4 %
Aroma (end of boil)	Hallertau Blanc	50.4 g	10 min	5.3 %
Aroma (end of boil)	Ekuanot	30.25 g	10 min	13.1 %
Aroma (end of boil)	Sybilla (mokra szyszka)	30 g	10 min	6 %

120 g mokrej szyszki mrożonej, ekwiwalent 30 g suchego

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP090 - San Diego Super Yeast	Ale	Slant	180 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	4.5 g	Mash	---
Water Agent	chlorek wapnia [ml]	0 g	Mash	---
Water Agent	epsom	2 g	Mash	---
Water Agent	kwask mlekowy [ml]	4.36 g	Mash	---
Fining	mech irlandzki	3 g	Boil	10 min
Water Agent	kwask askorbinowy	3.5 g	Bottling	---