

wino amerykanskie

- Gravity **25.9 BLG**
- ABV **12.2 %**
- IBU **79**
- SRM **11.5**
- Style **American Barleywine**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **28.3 liter(s)**
- Total mash volume **39.5 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **74 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **28.3 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **20 min** at **74C**
- Keep mash **5 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	6.5 kg (57.5%)	85 %	7
Grain	Pszeniczny	2.5 kg (22.1%)	85 %	4
Grain	Monachijski	0.9 kg (8%)	80 %	16
Grain	Biscuit Malt	0.6 kg (5.3%)	79 %	45
Grain	Oats, Flaked	0.4 kg (3.5%)	80 %	2
Grain	Caramunich® typ I	0.4 kg (3.5%)	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	zeus columbus	40 g	60 min	14.4 %
Boil	Chinook	25 g	30 min	11.1 %
Boil	Azacca	25 g	30 min	11.8 %
Boil	Amarillo	25 g	30 min	9.3 %
Boil	Lublin (Lubelski)	25 g	15 min	3.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Danstar - Nottingham	Ale	Slant	100 ml	Danstar
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Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	10 min