

# Zimowe

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **92**
- SRM **15.8**
- Style **American Barleywine**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.6 liter(s)**
- Total mash volume **40.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **30.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	9 kg (84.9%)	80 %	5
Grain	Płatki owsiane	1 kg (9.4%)	85 %	3
Grain	Jęczmień palony	0.2 kg (1.9%)	55 %	985
Sugar	Candi Sugar, Clear	0.4 kg (3.8%)	78.3 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	40 g	60 min	15.5 %
Boil	Sabro	50 g	15 min	15 %
Boil	Sorachi Ace	50 g	15 min	10 %
Aroma (end of boil)	Sabro	50 g	3 min	15 %
Aroma (end of boil)	Sorachi Ace	50 g	3 min	10 %
Dry Hop	Sabro	50 g	7 day(s)	10 %
Dry Hop	Sorachi Ace	50 g	7 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	23 g	Fermentis
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