

## Kwasy na warsztat #3

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **8**
- SRM **4.2**
- Style **Berliner Weisse**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18.5 liter(s)**

### Steps

- Temp **55 C**, Time **15 min**
- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **61.5C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **21.2 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (40%)	80 %	5
Grain	Viking Wheat Malt	2.5 kg (50%)	83 %	5
Grain	Strzegom Wiedeński	0.3 kg (6%)	79 %	10
Grain	Carahell	0.2 kg (4%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz	10 g	60 min	4 %
Boil	Centennial	4 g	60 min	10.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	46.82 ml	---

### Extras

Type	Name	Amount	Use for	Time
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Fining	Whirlfloe T	1.03 g	Boil	5 min
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