

Kwas I

- Gravity **10 BLG**
- ABV **4 %**
- IBU **6**
- SRM **3.7**
- Style **Berliner Weisse**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1 kg (33.3%)	80 %	5
Grain	Żytni	1 kg (33.3%)	85 %	8
Grain	Pilzneński	1 kg (33.3%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	5 g	30 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
<i>Lactobacillus rhamnosus</i>	Ale	Culture	400 g	---
FM10 O czym szumią wierzby	Ale	Slant	200 ml	Fermentum Mobile