

Hamerica

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **25**
- SRM **3.1**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.3 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **8.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.25 kg (50%)	81 %	4
Grain	Płatki pszeniczne	0.75 kg (30%)	85 %	3
Grain	Pszeniczny	0.25 kg (10%)	85 %	4
Grain	Płatki owsiane	0.25 kg (10%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	6.5 g	60 min	7.8 %
Boil	Citra	18 g	5 min	12 %
Boil	Amarillo	18 g	5 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	1 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
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Spice	Kolendra	10 g	Boil	7 min
Spice	Curacao	10 g	Boil	7 min
Spice	Skórka słodkiej pomarańczy	10 g	Boil	7 min