

AWA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **2.3**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **15 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **46 C**, Time **10 min**
- Temp **66 C**, Time **50 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **50.3C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **50 min** at **66C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	2 kg (40%)	85 %	4
Adjunct	Pszenica niesłodowana	1 kg (20%)	75 %	3
Grain	Pilznieński	2 kg (40%)	--- %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	20 min	10 %
Boil	Chinook	50 g	5 min	13 %
Boil	Cascade	50 g	3 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	125 ml	Fermentum Mobile