

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 |