

## a'la APA Warka nr 9

- Gravity **12.1 BLG**
- ABV ---
- IBU **23**
- SRM **5.6**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **12.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (70.6%)	85 %	7
Grain	Strzegom pszeniczny	1.25 kg (29.4%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	50 min	11.6 %
Boil	Citra	10 g	5 min	13.5 %
Boil	Equinox	10 g	5 min	13.4 %
Boil	Mosaic	10 g	5 min	11.7 %
Dry Hop	Citra	20 g	3 day(s)	13.5 %
Dry Hop	Equinox	20 g	3 day(s)	13.4 %
Dry Hop	Mosaic	20 g	3 day(s)	11.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale