

## Warka #009 - Saison

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **39**
- SRM **8.7**
- Style **Saison**

### Batch size

- Expected quantity of finished beer **6 liter(s)**
- Trub loss **5 %**
- Size with trub loss **6.3 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **7.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **4.3 liter(s)**
- Total mash volume **5.7 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **4.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **7.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	0.83 kg (55%)	80 %	4
Grain	Strzegom Wiedeński	0.22 kg (14.6%)	79 %	10
Grain	Pszeniczny	0.22 kg (14.6%)	85 %	4
Grain	Optima Karmelowy 20-30	0.06 kg (4%)	80 %	30
Grain	Optima Karmelowy 350-450	0.06 kg (4%)	80 %	299
Grain	Zakwaszający	0.04 kg (2.6%)	75 %	7
Sugar	Glukoza	0.08 kg (5.3%)	90 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	9 g	65 min	10 %
Boil	Lublin (Lubelski)	6 g	20 min	4 %
Boil	Lublin (Lubelski)	3 g	5 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M27 Belgian Ale	Ale	Dry	10 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	Curacao	6 g	Boil	15 min