

## Schops UPWR

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **13**
- SRM **9.8**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.6 liter(s)**
- Total mash volume **8.8 liter(s)**

### Steps

- Temp **60 C**, Time **5 min**
- Temp **68 C**, Time **45 min**
- Temp **70 C**, Time **5 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **6.6 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **5 min** at **60C**
- Keep mash **45 min** at **68C**
- Keep mash **5 min** at **70C**
- Keep mash **1 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	1.5 kg (68.2%)	85 %	4
Grain	Pilzneński	0.5 kg (22.7%)	81 %	4
Grain	Karmelowy Czerwony	0.1 kg (4.5%)	75 %	59
Grain	Strzegom Czekoladowy jasny	0.1 kg (4.5%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	10 g	60 min	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5.75 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Spice	gałka muszkatołowa	7.5 g	Boil	10 min

Flavor	Lactobacillus plantarum	5 g	Boil	1440 min
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