Imperialny Dunkelweizen

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **16**
- SRM **18.6**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **44 C**, Time **30 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **30 min** at **44C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	3 kg *(57.7%)*	85 %	4
Grain	Monachijski	2 kg *(38.5%)*	80 %	24
Grain	Carafa	0.2 kg *(3.8%)*	70 %	800

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M20 Bavarian Wheat	Wheat	Dry	10 g	Mangrove Jack's