

DUNKELWEIZEN

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **18**
- SRM **18.1**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **4 %**
- Size with trub loss **31.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **35 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **23.9 liter(s)**
- Total mash volume **31.2 liter(s)**

Steps

- Temp **42 C**, Time **15 min**
- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **23.9 liter(s)** of strike water to **45.3C**
- Add grains
- Keep mash **15 min** at **42C**
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **35 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny ciemny	4 kg (55.2%)	85 %	16
Grain	Monachijski typ II	2 kg (27.6%)	79 %	22
Grain	Melanoidynowy	0.25 kg (3.4%)	75 %	60
Grain	Caramunich Typ II	0.5 kg (6.9%)	73 %	120
Grain	Caraaroma	0.5 kg (6.9%)	78 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	12 %
Boil	Magnum	10 g	15 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	200 ml	Fermentum Mobile