

## #094 Dunkelweizen

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **13**
- SRM **18.6**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **8 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **17 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **63 %**
- Liquor-to-grist ratio **4.15 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **24.7 liter(s)**

### Steps

- Temp **44 C**, Time **20 min**
- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **19.9 liter(s)** of strike water to **46.9C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Wheat Malt	2.7 kg (56.3%)	83 %	5
Grain	Viking Munich Malt	1.6 kg (33.3%)	78 %	20
Grain	Caraaroma	0.4 kg (8.3%)	78 %	400
Grain	Fawcett - Pale Chocolate	0.1 kg (2.1%)	71 %	600

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	30 g	60 min	2.4 %
Boil	Saaz	10 g	60 min	3.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Other	łuska ryżowa	60 g	Mash	90 min

Other	pożywka dla drożdży Pinnacle	0.5 g	Boil	10 min
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