

## #33 Dunkelweizen

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **14**
- SRM **12.2**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **0 %**
- Size with trub loss **22.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

### Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

### Steps

- Temp **63 C**, Time **0 min**
- Temp **100 C**, Time **15 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **16 min**

### Mash step by step

- Heat up **12.6 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **0 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **16 min** at **76C**
- Keep mash **15 min** at **100C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słodownia Strzegom - pszeniczny	2 kg (47.6%)	83 %	3
Grain	Słodownia Strzegom - monachijski II	1.5 kg (35.7%)	79 %	16
Grain	Słodownia Strzegom - pilzneński	0.5 kg (11.9%)	80 %	3
Grain	Słodownia Strzegom - barwiący	0.1 kg (2.4%)	71 %	1300
Grain	Carahell	0.1 kg (2.4%)	75 %	24

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	60 min	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM41 - Gwoździe i banany	Ale	Culture	200 g	Fermentum Mobile