

## #51 Dunkelweizen

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **18**
- SRM **23.4**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

### Steps

- Temp **45 C**, Time **15 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **15.9 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.5 kg (28.3%)	80 %	4
Grain	Pszeniczny	2.5 kg (47.2%)	85 %	4
Grain	Strzegom Monachijski typ II	1 kg (18.9%)	79 %	22
Grain	Strzegom Barwiący	0.2 kg (3.8%)	68 %	1300
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg (1.9%)	73 %	1001

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	60 min	5 %
Boil	Tradition	15 g	20 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	300 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	4 g	Mash	60 min
Fining	whirlfloc	1 g	Boil	10 min
Other	witamina C	4 g	Bottling	---