

## #29 Dunkelweizen

- Gravity **12.4 BLG**
- ABV ---
- IBU **18**
- SRM **17**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **44 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **15 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **47.4C**
- Add grains
- Keep mash **10 min** at **44C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **76C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Vienna Malt	1 kg (20%)	81 %	8
Grain	Weyermann pszeniczny jasny	2.5 kg (50%)	80 %	6
Grain	caramel pils	0.5 kg (10%)	81 %	5
Grain	weyermann - caramunich III	0.7 kg (14%)	81 %	150
Grain	Fawcett - Crystal wheat	0.3 kg (6%)	70 %	90

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Tradition	30 g	80 min	4.5 %
Boil	tradition	20 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM41 Gwoździe i Banany	Wheat	Slant	150 ml	Fermentum Mobile
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## Notes

- 44°C do 40°C - 10 min (podczas dekokcji temp. spadła poniżej 40°C)  
Dekokt 64-63°C 30min,  
72°C-15min  
Gotowanie 15min  
Po dolaniu dekoktu 64-63°C 30min,  
72°C 30min,  
76°C 15min  
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