

# Dunkelweizen

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **19**
- SRM **16.5**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **10 min** at **55C**
- Keep mash **15 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1 kg (17.9%)	79 %	10
Grain	Strzegom Monachijski typ II	1 kg (17.9%)	79 %	22
Grain	BESTMALZ - Best Wheat Malt Dark	3 kg (53.6%)	82 %	18
Grain	Weyermann - Carawheat	0.5 kg (8.9%)	77 %	97
Grain	Weyermann - Carafa III	0.1 kg (1.8%)	70 %	1024

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	25 g	60 min	4 %
Boil	Tettnang	25 g	30 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M20 Bavarian Wheat	Wheat	Dry	25 g	Mangrove Jack's
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