

Unkel Dunkel

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **14**
- SRM **14.2**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **80 min**
- Evaporation rate **12 %/h**
- Boil size **24.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **22.9 liter(s)**
- Total mash volume **27.9 liter(s)**

Steps

- Temp **43 C**, Time **20 min**
- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.9 liter(s)** of strike water to **45.6C**
- Add grains
- Keep mash **20 min** at **43C**
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pszeniczny	2.7 kg (53.1%)	81 %	6
Grain	Strzegom Pale Ale	1 kg (19.7%)	79 %	6
Grain	Strzegom Wiedeński	1 kg (19.7%)	79 %	10
Grain	Strzegom Karmel 150	0.2 kg (3.9%)	75 %	150
Grain	Viking melanoidynowy	0.1 kg (2%)	75 %	60
Grain	Strzegom Barwiący	0.08 kg (1.6%)	68 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	25 g	60 min	4.5 %
Boil	Hallertau	10 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - Weihenstephan Weizen	Ale	Liquid	100 ml	Wyeast Labs
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