

Rauchdunkelweizen

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **19**
- SRM **29**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.75 liter(s) / kg**
- Mash size **22.9 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **52 C**, Time **15 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **22.9 liter(s)** of strike water to **47.2C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **15 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	3 kg (49.2%)	85 %	4
Grain	wędzony bestmaltz	1 kg (16.4%)	80 %	6
Grain	Strzegom Wiedeński	1 kg (16.4%)	79 %	9
Grain	Fawcett - Pszeniczny Czekoladowy	0.3 kg (4.9%)	73 %	1001
Grain	Weyermann - Carawheat	0.5 kg (8.2%)	77 %	125
Grain	Carafa II	0.3 kg (4.9%)	70 %	900

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	60 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M20 Bavarian Wheat	Wheat	Dry	10 g	Mangrove Jack's