

pszeniczne DunkelWeizen

- Gravity **13.1 BLG**
- ABV ---
- IBU **20**
- SRM **20**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **20.2 liter(s)**

Steps

- Temp **44 C**, Time **20 min**
- Temp **53 C**, Time **5 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.2 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **5 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Wheat Malt	2.5 kg (49.5%)	83 %	5
2021 bestmalz				
Grain	Monachijski	1 kg (19.8%)	80 %	16
vm				
Grain	Viking Vienna Malt	1 kg (19.8%)	79 %	7
vm				
Grain	Karmelowy Pszeniczny Strzegom	0.4 kg (7.9%)	79 %	130
weyermann				
Grain	Strzegom Czekoladowy ciemny	0.15 kg (3%)	68 %	1200
vm - ostatnie 15 min.				

Hops

Use for	Name	Amount	Time	Alpha acid
---------	------	--------	------	------------

Boil	Hallertau tradition	15 g	60 min	6.3 %
Boil	Hallertau tradition	15 g	15 min	6.3 %
Aroma (end of boil)	Hallertau tradition	15 g	5 min	6.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Liquid	1000 ml	Fermentum Mobile