

Wheat Porter

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **20**
- SRM **35.2**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **44 C**, Time **20 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **45 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Dark Wheat Malt	4 kg (50%)	85 %	14
Grain	Monachijski typ II 20-25 EBC Weyermann	1 kg (12.5%)	80 %	20
Grain	Strzegom Monachijski typ I	1 kg (12.5%)	79 %	16
Grain	Viking Munich Malt	1 kg (12.5%)	76 %	7
sólód diastatyczny Viking Malt				
Grain	Weyermann - Melanoiden Malt	0.5 kg (6.3%)	81 %	53
Grain	Chocolate Malt (UK)	0.5 kg (6.3%)	73 %	1200
Na mashout				

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	50 g	60 min	3 %
Boil	Hallertau	50 g	20 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Bavarian Wheat	Ale	Liquid	200 ml	Wyeast Labs