

American Wheat #4

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **32**
- SRM **4.3**
- Style **American Wheat or Rye Beer**

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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **50 C**, Time **15 min**
- Temp **64 C**, Time **45 min**
- Temp **70 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pszeniczny	2.6 kg (50%)	81 %	6
Grain	Strzegom Pilzneński	2 kg (38.5%)	80 %	4
Grain	Strzegom Pale Ale	0.6 kg (11.5%)	79 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	15 g	60 min	11.2 %
Whirlpool	Hallertau Blanc	25 g	15 min	11 %
Whirlpool	Cascade PL	50 g	15 min	4.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	fermentis