

American Wheat

- Gravity **11.9 BLG**
- ABV ---
- IBU **27**
- SRM **6.5**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **3800 liter(s)**
- Trub loss **10 %**
- Size with trub loss **4180 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **4807 liter(s)**

Mash information

- Mash efficiency **91 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **2093.2 liter(s)**
- Total mash volume **2790.9 liter(s)**

Steps

- Temp **50 C**, Time **30 min**
- Temp **64 C**, Time **45 min**
- Temp **70 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **2093.2 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **3411.5 liter(s)** of **76C** water or to achieve **4807 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann pszeniczny jasny	383.5 kg (55%)	80 %	6
Grain	Weyermann - Pale Ale Malt	261.7 kg (37.5%)	85 %	7
Grain	Karmelowy Czerwony	48.4 kg (6.9%)	75 %	59
Grain	Weyermann - Acidulated Malt	4.12 kg (0.6%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	2800 g	60 min	15.5 %
Boil	Amarillo	5490 g	0 min	9.5 %
Whirlpool	Citra	3640 g	15 min	12 %
Whirlpool	Amarillo	4120 g	15 min	9.5 %
Dry Hop	Citra	2500 g	5 day(s)	9.5 %
Dry Hop	Amarillo	1640 g	5 day(s)	9.5 %

Dry Hop	Citra	2510 g	2 day(s)	12 %
Dry Hop	Amarillo	1230 g	2 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	5 g	Mash	60 min
Water Agent	Chlorek wapnia	9 g	Mash	60 min