

Columbus american wheat

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **21**
- SRM **3.5**
- Style **American Wheat or Rye Beer**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	2 kg (50%)	85 %	4
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	2 kg (50%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	55 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	15 g	10 min	15.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	30 g	0 min	15.5 %
Whirlpool	Columbus/Tomahawk/Zeus	20 g	0 min	15.5 %

Yeasts

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