

# 3

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **3.4**
- 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 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	3 kg (66.7%)	85 %	4
Grain	Pilznieński	1.5 kg (33.3%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Jarrylo	10 g	60 min	15 %
Boil	Centennial	10 g	10 min	10.5 %
Whirlpool	Citra	10 g	5 min	12 %

## Yeasts

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