### American Wheat z zestem

- Gravity 11.9 BLG
- ABV 4.8 %
- IBU **24**
- SRM 3.8
- Style American Wheat or Rye Beer

#### **Batch size**

- Expected quantity of finished beer 50 liter(s)
- Trub loss 5 %
- Size with trub loss 52.5 liter(s)
- · Boil time 60 min
- Evaporation rate 5 %/h
- Boil size 60.4 liter(s)

## **Mash information**

- Mash efficiency 85 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 30.6 liter(s)
- Total mash volume 40.8 liter(s)

#### **Steps**

- Temp 55 C, Time 5 min
  Temp 63 C, Time 40 min
  Temp 72 C, Time 30 min
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up 30.6 liter(s) of strike water to 60.8C
- Add grains
- Keep mash 5 min at 55C
- Keep mash 40 min at 63C
- Keep mash 30 min at 72C
- Keep mash 10 min at 76C
- Sparge using 40 liter(s) of 76C water or to achieve 60.4 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg <i>(24.5%)</i>	80 %	5
Grain	Pilzneński	2 kg (19.6%)	81 %	4
Grain	Pszeniczny	4 kg <i>(39.2%)</i>	85 %	4
Grain	Monachijski	1.2 kg (11.8%)	80 %	16
Grain	Płatki ryżowe	0.5 kg <i>(4.9%)</i>	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Boil	Columbus/Tomahawk/Zeus	50 g	10 min	15.5 %
Whirlpool	Citra	100 g	0 min	12 %
Dry Hop	Simcoe	200 g	7 day(s)	13.2 %
Dry Hop	Centennial	100 g	7 day(s)	10.5 %

#### **Yeasts**

Name Type	Form	Amount	Laboratory
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US-05	Ale	Dry	22.73 g	Fermentis

# **Extras**

Туре	Name	Amount	Use for	Time
Spice	Zest z cytrusów	50 g	Boil	5 min