### **APA**

- Gravity 12.4 BLG ABV 5 %
- IBU **45**
- SRM **4.4**
- Style American Pale Ale

## **Batch size**

- Expected quantity of finished beer 10 liter(s)
- Trub loss 5 %
- Size with trub loss 12.5 liter(s)
- · Boil time 60 min
- Evaporation rate 20 %/h
- Boil size 16.8 liter(s)

### **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 9 liter(s)
- Total mash volume 12 liter(s)

# **Steps**

- Temp **65 C**, Time **60 min** Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

# Mash step by step

- Heat up 9 liter(s) of strike water to 72.5C
- Add grains
- Keep mash 60 min at 65C
- Keep mash 10 min at 72C
- Keep mash 1 min at 78C
- Sparge using 10.8 liter(s) of 76C water or to achieve 16.8 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (66.7%)	80 %	5
Grain	Strzegom Wiedeński	0.5 kg <i>(16.7%)</i>	79 %	10
Grain	Pszeniczny	0.5 kg <i>(16.7%)</i>	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	15 g	60 min	13.2 %
Boil	Amarillo	5 g	10 min	8.9 %
Boil	Cascade	5 g	10 min	5.8 %
Boil	Citra	5 g	10 min	12.5 %
Dry Hop	Mosaic	10 g	4 day(s)	13.2 %
Dry Hop	Amarillo	20 g	4 day(s)	8.9 %
Dry Hop	Cascade	20 g	4 day(s)	5.8 %
Dry Hop	Citra	20 g	4 day(s)	12.5 %

#### **Yeasts**

Name Type	Form	Amount	Laboratory
-----------	------	--------	------------

·				· ·
Cafala LIC OF	1 1 1 -	Dray	11 5 ~	Earmontic
i Salale US-US	Ale	Dry	11.5 Q	i rermenus
		1 = . 7	9	