- Gravity 16.3 BLG
- ABV ----
- IBU **91**
- SRM 11.2
- Style American IPA

#### **Batch size**

- Expected quantity of finished beer 20 liter(s)
- Trub loss 5 %
- Size with trub loss 22 liter(s)
- · Boil time 120 min
- Evaporation rate 5 %/h
- Boil size 25.3 liter(s)

## **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 18 liter(s)
- Total mash volume 24 liter(s)

## **Steps**

- Temp **65 C**, Time **40 min** Temp **72 C**, Time **40 min**
- Temp **75 C**, Time **1 min**

# Mash step by step

- Heat up 18 liter(s) of strike water to 72.5C
- Add grains
- Keep mash 40 min at 65C
- Keep mash 40 min at 72C
- Keep mash 1 min at 75C
- Sparge using 13.3 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (83.3%)	85 %	7
Grain	Monachijski	0.7 kg (11.7%)	80 %	16
Grain	Caramel/Crystal Malt - 20L	0.3 kg <i>(5%)</i>	75 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	30 g	110 min	13.59 %
Boil	Cascade	30 g	80 min	6.8 %
Boil	Cascade	30 g	50 min	6.8 %
Boil	Willamette	20 g	20 min	4.7 %
Whirlpool	Willamette	20 g	20 min	4.7 %
Dry Hop	Equinox	20 g	7 day(s)	13.59 %
Dry Hop	Cascade	30 g	7 day(s)	6.8 %
Dry Hop	Willamette	20 g	7 day(s)	4.7 %

## **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale S-05	Ale	Dry	11.5 g	

# **Extras**

Туре	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min