- Gravity 12.1 BLG
- ABV **4.9** %
- IBU 36
- SRM 4
- Style American IPA

#### **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 14.4 liter(s)
- Total mash volume 19.2 liter(s)

# **Steps**

- Temp 65 C, Time 20 min Temp 72 C, Time 40 min
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up 14.4 liter(s) of strike water to 72.5C
- Add grains
- Keep mash 20 min at 65C
- Keep mash 40 min at 72C
- Keep mash 1 min at 78C
- Sparge using 15.7 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4.5 kg <i>(93.8%)</i>	81 %	5
Grain	Weyermann - Carapils	0.3 kg <i>(6.3%)</i>	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pacific Jade	20 g	60 min	13 %
Aroma (end of boil)	Green Bullet	15 g	10 min	11 %

# **Yeasts**

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