#### 3x IPA

- Gravity 14.5 BLG
- ABV **6** %
- IBU **30**
- SRM **4.4**
- Style American IPA

#### **Batch size**

- Expected quantity of finished beer 37 liter(s)
- Trub loss 5 %
- Size with trub loss 38.9 liter(s)
- Boil time 60 min
- Evaporation rate 15 %/h
- Boil size 48.9 liter(s)

# **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 25.6 liter(s)
- Total mash volume 32.9 liter(s)

# **Steps**

- Temp 67 C, Time 90 min
  Temp 76 C, Time 1 min

# Mash step by step

- Heat up 25.6 liter(s) of strike water to 73.7C
- Add grains
- Keep mash 90 min at 67C
- Keep mash 1 min at 76C
- Sparge using 30.6 liter(s) of 76C water or to achieve 48.9 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4.5 kg <i>(43.7%)</i>	81 %	5
Adjunct	Pszenica niesłodowana	3 kg <i>(29.1%)</i>	60 %	3
Grain	Weyermann - Pale Ale Malt	2.8 kg <i>(27.2%)</i>	85 %	7

# Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	55 g	60 min	10 %