# **Christmas Ale**

- Gravity 15.9 BLG
- ABV 6.7 %
- IBU 39
- SRM 11.6
- Style Christmas/Winter Specialty Spiced Beer

## **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 19.5 liter(s)
- Total mash volume 26 liter(s)

### **Steps**

- Temp 62 C, Time 30 min
  Temp 72 C, Time 30 min
- Temp 76 C, Time 15 min

# Mash step by step

- Heat up 19.5 liter(s) of strike water to 69C
- Add grains
- Keep mash 30 min at 62C
- Keep mash 30 min at 72C
- Keep mash 15 min at 76C
- Sparge using 12.3 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg <i>(61.5%)</i>	80 %	5
Grain	Vienna Malt	2 kg <i>(30.8%)</i>	78 %	8
Grain	Weyermann - Carapils	0.25 kg <i>(3.8%)</i>	78 %	4
Grain	Caraaroma	0.25 kg <i>(3.8%)</i>	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Mandarina Bavaria	30 g	60 min	10 %
Boil	Mandarina Bavaria	20 g	10 min	10 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis

#### **Extras**

Туре	Name	Amount	Use for	Time
Flavor	Mandarynki	1000 g	Secondary	7 day(s)

Flavor	Pomarańcze	1000 g	Secondary	7 day(s)
Herb	Rozmaryn	50 g	Secondary	7 day(s)