## Biere de Garde

- Gravity 17.1 BLG
- ABV 7.3 %
- IBU **15**
- SRM **5.9**
- Style Saison

#### **Batch size**

- Expected quantity of finished beer 22 liter(s)
- Trub loss 5 %
- Size with trub loss 23.1 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 27.8 liter(s)

#### **Mash information**

- Mash efficiency 70 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 23.8 liter(s)
- Total mash volume 30.6 liter(s)

# **Steps**

- Temp **62 C**, Time **45 min** Temp **71 C**, Time **45 min**
- Temp 3 C, Time 78 min

## Mash step by step

- Heat up 23.8 liter(s) of strike water to 0.6C
- Add grains
- Keep mash 78 min at 3C
- Keep mash 45 min at 62C
- Keep mash 45 min at 71C
- Sparge using 10.8 liter(s) of 76C water or to achieve 27.8 liter(s) of wort

#### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	5.5 kg <i>(72.4%)</i>	81 %	4
Grain	Pszeniczny	0.5 kg (6.6%)	85 %	4
Grain	Briess - Aromatic Malt	0.2 kg <i>(2.6%)</i>	77 %	60
Grain	Weyermann - Carapils	0.4 kg (5.3%)	78 %	4
Grain	Biscuit Malt	0.2 kg (2.6%)	79 %	45
Sugar	Candi Sugar, Clear	0.8 kg (10.5%)	78.3 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Golding	20 g	70 min	3.6 %
Boil	Tettnang	20 g	70 min	4 %
Aroma (end of boil)	Styrian Golding	20 g	10 min	3.6 %

#### **Yeasts**

Name	Type	Form	Amount	Laboratory
Ivaille	i ype	1 01 111	Aillouit	Laboratory

FM12 W szkocką	Ale	Liquid	3000 ml	Fermentum Mobile
kratę				