# W34/70 tettnager

- Gravity 11.9 BLG
- ABV 4.8 %
- IBU **39**
- SRM **3.9**
- Style German Pilsner (Pils)

### **Batch size**

- Expected quantity of finished beer 56 liter(s)
- Trub loss 2 %
- Size with trub loss 57.1 liter(s)
- Boil time 70 min
- Evaporation rate 6 %/h
- Boil size 65.3 liter(s)

### **Mash information**

- Mash efficiency 85 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 33 liter(s)
- Total mash volume 44 liter(s)

#### **Steps**

- Temp **65 C**, Time **15 min** Temp **72 C**, Time **45 min**
- Temp 78 C, Time 10 min

# Mash step by step

- Heat up 33 liter(s) of strike water to 72.5C
- Add grains
- Keep mash 15 min at 65C
- Keep mash 45 min at 72C
- Keep mash 10 min at 78C
- Sparge using 43.3 liter(s) of 76C water or to achieve 65.3 liter(s) of wort

### **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	8.5 kg <i>(77.3%)</i>	82 %	4
Grain	Viking Munich Malt	1 kg (9.1%)	78 %	18
Grain	Viking Carabody Malt	1 kg (9.1%)	78 %	8
Grain	Weyermann - Acidulated Malt	0.5 kg <i>(4.5%)</i>	80 %	7

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	100 g	50 min	5.2 %
Aroma (end of boil)	Tettnang	100 g	10 min	5.2 %
Whirlpool	Tettnang	150 g	20 min	5.2 %

### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	700 ml	Fermentis

### **Extras**

Туре	Name	Amount	Use for	Time
Fining	whirfloc	3 g	Boil	10 min
Water Agent	ZnCl2	6 g	Boil	1 min