# # 176 Italian Pils

- Gravity 12.1 BLG
- ABV 4.9 %
- IBU 41
- SRM 3.8
- Style German Pilsner (Pils)

## **Batch size**

- Expected quantity of finished beer 15 liter(s)
- Trub loss 15 % •
- Size with trub loss 19.5 liter(s) •
- Boil time 90 min
- Evaporation rate 10 %/h
- Boil size 24.1 liter(s)

## Mash information

- Mash efficiency 70 %
- Liquor-to-grist ratio 4.1 liter(s) / kg ٠
- Mash size 19.3 liter(s) .
- Total mash volume 24 liter(s)

#### Steps

- Temp 64 C, Time 45 min
  Temp 67 C, Time 15 min
- Temp 78 C, Time 10 min

## Mash step by step

- Heat up 19.3 liter(s) of strike water to 69.4C
- Add grains
- ٠ Keep mash 45 min at 64C
- Keep mash 15 min at 67C •
- Keep mash 10 min at 78C
- Sparge using 9.5 liter(s) of 76C water or to achieve 24.1 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	4.5 kg <i>(95.7%)</i>	81 %	4
Grain	Weyermann - Carapils	0.2 kg <i>(4.3%)</i>	78 %	4

#### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	25 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	25 g	30 min	4.5 %
Boil	Saaz (Czech Republic)	30 g	20 min	4.5 %
Boil	Saaz (Czech Republic)	30 g	10 min	4.5 %
Boil	Saaz (Czech Republic)	40 g	1 min	4.5 %
Dry Hop	Tettnang	50 g	5 day(s)	4 %

#### Yeasts

Name	Туре	Form	Amount	Laboratory
Lalbrew - Novalager	Lager	Dry	22 g	