

# Włoski pils piwowar (36) 11-12,5 blg

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **40**
- SRM **4.1**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **63 C**, Time **60 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	5 kg (97.1%)	81 %	5
Grain	Weyermann - Carapils	0.15 kg (2.9%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	30 g	30 min	11 %
Aroma (end of boil)	Hallertau Spalt Select	60 g	15 min	3.4 %
Whirlpool	Saaz (Czech Republic)	30 g	20 min	4.5 %
Dry Hop	Hallertau Mittelfruh	60 g	3 day(s)	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Dry	23 g	---