

## #20 Italian Pils

---

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **49**
- SRM **3.4**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **23.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **28.7 liter(s)**

### Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (100%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	46 g	60 min	10.2 %
Boil	Aurora	10 g	5 min	8.5 %
Aroma (end of boil)	Saaz Late	30 g	0 min	3 %
Whirlpool	Aurora	20 g	1 min	8.5 %
Whirlpool	Hallertau Blanc	20 g	1 min	11 %
Dry Hop	Aurora	20 g	2 day(s)	8.5 %
Dry Hop	Hallertau Blanc	30 g	2 day(s)	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	23 g	Fermentis