

## Italian Pils (IP)

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **35**
- SRM **3.9**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

### Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5.3 kg (98.1%)	72 %	4
Grain	Wiedeński Weyermann	0.1 kg (1.9%)	72 %	8

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	25 g	0 min	5 %
Boil	lunga	20 g	60 min	12.4 %
Boil	lunga	10 g	15 min	12.4 %
Dry Hop	Saaz (Czech Republic)	30 g	4 day(s)	4.5 %
Dry Hop	Hallertau Tradition	25 g	4 day(s)	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 2308 Munich Lager	Lager	Liquid	50 ml	Mrożone