

# PILS

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **3.7**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **9 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **63 C**, Time **50 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **1 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.85 kg (95%)	80 %	4
Grain	Castlemalting - Cara Clair	0.15 kg (5%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Boil	Tettnang	12 g	10 min	4 %
Boil	Hallertau Blanc	30 g	5 min	7.5 %
Boil	Columbus/Tomahawk/Zeus	15 g	1 min	12.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
wyeast 2782 Staro Prague Lager	Lager	Liquid	1000 ml	Wyeast

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	1 g	Boil	10 min