

Pils 1 Covid

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **45**
- SRM **3.4**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.6 liter(s)**
- Total mash volume **8.8 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **6.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.1 kg (95.5%)	81 %	4
Grain	Weyermann - Carapils	0.1 kg (4.5%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	12.5 g	60 min	10 %
Boil	Marynka	12.5 g	20 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	0 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	5.75 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3.5 g	Boil	15 min