#22 pilz

- Gravity 13.8 BLG
- ABV 5.7 %
- IBU **42**
- SRM 4.8
- Style German Pilsner (Pils)

Batch size

- Expected quantity of finished beer 22 liter(s)
- Trub loss 5 %
- Size with trub loss 23.1 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 27.8 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3.5 liter(s) / kg
- Mash size 21 liter(s)
- Total mash volume 27 liter(s)

Steps

- Temp **50 C**, Time **15 min** Temp **62 C**, Time **30 min** Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up 21 liter(s) of strike water to 54.3C
- Add grains
- Keep mash 15 min at 50C
- Keep mash 30 min at 62C
- Keep mash 30 min at 72C
- Keep mash 10 min at 78C
- Sparge using 12.8 liter(s) of 76C water or to achieve 27.8 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Strzegom Monachijski typ I	1 kg <i>(16.7%)</i>	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Herkules	20 g	60 min	20 %
Aroma (end of boil)	Tradition	20 g	10 min	6 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Old German Altbier9	Ale	Dry	10 g	Gozdawa

Notes

24h po warzeniu zadano drożdże w temp 16stC Mar 5, 2019, 8:52 AM