pszeniczny pilsik - no sparge

- Gravity **12.4 BLG**
- ABV **---**
- IBU **64**
- SRM **3.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **6 %**
- Size with trub loss **19.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **22.1 liter(s)**

Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **4.41 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **29.5 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg *(45.9%)*	81 %	4
Grain	Pszenica niesłodowana	1.7 kg *(31.2%)*	75 %	3
Grain	Słód pszeniczny	1 kg *(18.3%)*	82 %	---
Grain	łuska ryżowa	0.25 kg *(4.6%)*	1 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga szyszka	20 g	60 min	10 %
Boil	Magnat	20 g	55 min	12 %
Boil	Marynka	12 g	15 min	8 %
Aroma (end of boil)	Marynka	15 g	5 min	8 %
Aroma (end of boil)	Oktawia bardzo słaba goryczka mimo 7,8 alfa otwarta	20 g	2 min	4 %
Whirlpool	relax	30 g	5 min	1 %

Yeasts

Name	Type	Form	Amount	Laboratory
w34	Lager	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	esencja chmielowa	1 g	Secondary	1 day(s)