

Wolf & Dragon PILS!

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **39**
- SRM **3.7**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.6 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **26.9 liter(s)**

Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **50 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **71C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **50 min** at **72C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (83.3%)	81 %	4
Grain	Rye, Flaked	0.4 kg (8.3%)	78.3 %	4
Grain	Weyermann - Carapils	0.4 kg (8.3%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Wolf	10 g	60 min	13.7 %
Boil	Styrian Wolf	20 g	15 min	13.7 %
Aroma (end of boil)	Styrian Dragon	30 g	2 min	6.9 %
Aroma (end of boil)	Styrian Wolf	30 g	2 min	13.7 %
Dry Hop	Styrian Wolf	40 g	5 day(s)	13.7 %
Dry Hop	Styrian Dragon	70 g	5 day(s)	6.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Liquid	300 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	Whirfloc	1 g	Boil	5 min