

White "wine"

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **31**
- SRM **3.6**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **15 min**
- Temp **100 C**, Time **10 min**
- Temp **72 C**, Time **15 min**
- Temp **100 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **15 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Keep mash **10 min** at **100C**
- Keep mash **10 min** at **100C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Ireks pilzneński	4 kg (97.6%)	83 %	4
Grain	Ireks Palisander	0.1 kg (2.4%)	82 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla 2017	35 g	80 min	6.7 %
Whirlpool	Lubelski 2018	30 g	20 min	2.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lagerowe	Lager	Slant	200 ml	X