

Lubartowskie Pale Ale

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **34**
- SRM **6.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **27.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (32.8%)	79 %	6
Grain	Strzegom Wiedeński	0.5 kg (8.2%)	79 %	10
Grain	Strzegom Karmel 150	0.2 kg (3.3%)	75 %	150
Grain	Żytni	1.5 kg (24.6%)	85 %	8
Grain	Strzegom Pszeniczny	1.5 kg (24.6%)	81 %	6
Grain	Rye, Flaked	0.4 kg (6.6%)	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	45 min	10 %
Boil	Oktawia	10 g	30 min	7.1 %
Aroma (end of boil)	Puławski	10 g	10 min	8.5 %
Aroma (end of boil)	Oktawia	10 g	5 min	7.1 %
Aroma (end of boil)	Puławski	10 g	5 min	8.5 %
Whirlpool	Oktawia	10 g	0 min	7.1 %
Whirlpool	Puławski	10 g	0 min	12 %

Dry Hop	Oktawia	30 g	4 day(s)	7.1 %
Dry Hop	Puławski	30 g	4 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	100 ml	Fermentum Mobile