

Tylko PL

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **36**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.5 liter(s)**
- Total mash volume **12.2 liter(s)**

Steps

- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **9.5 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.4 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.7 kg (100%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	10 g	60 min	11 %
Boil	Oktawia	10 g	15 min	4 %
Boil	Lublin (Lubelski)	10 g	15 min	3.8 %
Boil	Tomyski	10 g	15 min	3.9 %
Dry Hop	Oktawia	20 g	3 day(s)	4 %
Dry Hop	Lublin (Lubelski)	20 g	3 day(s)	3.8 %
Dry Hop	Tomyski	20 g	3 day(s)	3.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale BE-134	Ale	Dry	7 g	Fermentis