

Robin

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **34**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Dust Malz Pale Ale	3 kg (60%)	79 %	7
Grain	BESTMALZ - Best Pilsen	1 kg (20%)	80.5 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (10%)	79 %	22
Grain	Durst Malz Karmel 30	0.3 kg (6%)	75 %	30
Grain	Płatki owsiane	0.2 kg (4%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Eureka!	10 g	60 min	18 %
Boil	Cascade	5 g	30 min	6 %
Boil	Eureka!	5 g	30 min	18 %
Boil	Cascade	5 g	5 min	6 %
Boil	Lemon drop	10 g	5 min	4.6 %
Boil	Eureka!	5 g	5 min	18 %
Whirlpool	Eureka!	10 g	15 min	18 %

Whirlpool	Lemon drop	10 g	15 min	4.6 %
Whirlpool	Cascade	10 g	15 min	6 %
Dry Hop	Lemon drop	10 g	2 day(s)	4.6 %
Dry Hop	Eureka!	10 g	2 day(s)	18 %
Dry Hop	Cascade	10 g	2 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
Herb	Pędy Świerkowe	15 g	Secondary	7 day(s)
Herb	Pędy Świerkowe	10 g	Secondary	2 day(s)