

Cienias

- Gravity **7.3 BLG**
- ABV **2.8 %**
- IBU **63**
- SRM **3.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **1 %**
- Size with trub loss **15.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **6.8 liter(s)**
- Total mash volume **8.5 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **6.8 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1 kg (55.6%)	79 %	6
Grain	Strzegom Pszeniczny	0.4 kg (22.2%)	81 %	6
Grain	Oats, Flaked	0.2 kg (11.1%)	80 %	2
Sugar	Milk Sugar (Lactose)	0.1 kg (5.6%)	76.1 %	0
Grain	Strzegom Karmel 30	0.1 kg (5.6%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	50 min	10 %
Boil	Equinox	15 g	20 min	13.1 %
Aroma (end of boil)	Mosaic	15 g	5 min	10 %
Aroma (end of boil)	Amarillo	15 g	5 min	9.5 %
Whirlpool	Equinox	15 g	0 min	13.1 %
Whirlpool	Mosaic	15 g	0 min	10 %
Whirlpool	Amarillo	15 g	0 min	9.5 %
Dry Hop	Citra	30 g	3 day(s)	12 %
Dry Hop	Amarillo	30 g	3 day(s)	9.5 %

Dry Hop	Centennial	30 g	3 day(s)	10.5 %
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Yeasts

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