

2konkursowe

- Gravity **17.5 BLG**
- ABV ---
- IBU **12**
- SRM **18.5**
- Style **American IPA**

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 **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **63 C**, Time **120 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **120 min** at **63C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (52.2%)	81 %	4
Grain	Karmelowy Czerwony	0.7 kg (10.4%)	75 %	59
Grain	Strzegom Bursztynowy	0.8 kg (11.9%)	70 %	49
Grain	Biscuit Malt	0.5 kg (7.5%)	79 %	45
Grain	Karmelowy Pszeniczny Strzegom	0.5 kg (7.5%)	79 %	130
Grain	Strzegom Karmel 300	0.3 kg (4.5%)	70 %	299
Grain	pszeniczny ciemny	0.4 kg (6%)	76 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Eldorado	50 g	5 min	13.2 %
Dry Hop	Galena	50 g	4 day(s)	13.1 %
Dry Hop	Citra	50 g	12 day(s)	13.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	400 ml	Fermentum Mobile