

Little hope

- Gravity **12.9 BLG**
- ABV ---
- IBU **73**
- SRM **7**
- 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 **7 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **66 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1.4 kg (26.9%)	85 %	7
Grain	Pilzneński	3 kg (57.7%)	81 %	4
Grain	Strzegom Pszeniczny	0.5 kg (9.6%)	81 %	6
Grain	Strzegom Bursztynowy	0.3 kg (5.8%)	70 %	49

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zeus	30 g	60 min	15.5 %
Boil	Cascade	30 g	20 min	6 %
Boil	Cascade	15 g	10 min	6 %
Whirlpool	Cascade	15 g	0 min	6 %
Dry Hop	Cascade	30 g	7 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	200 ml	---