

Kepler session IPA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **49**
- SRM **0.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **19.5 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.5 kg (51.3%)	79 %	---
Grain	Słód monachijski Optima	0.5 kg (10.3%)	80 %	---
Grain	Słód pszeniczny Optima	0.5 kg (10.3%)	80 %	---
Grain	Strzegom Pilzneński	1.2 kg (24.6%)	80 %	---
Grain	Płatki owsiane	0.17 kg (3.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	15 g	60 min	17 %
Boil	Cascade	15 g	20 min	7 %
Boil	Centennial	15 g	20 min	10.5 %
Aroma (end of boil)	Cascade	20 g	1 min	7 %
Aroma (end of boil)	Centennial	20 g	1 min	10.5 %
Dry Hop	Cascade	25 g	3 day(s)	6 %
Dry Hop	Centennial	25 g	3 day(s)	10.5 %

Yeasts

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