

## #20 Session IPA SingeHop Zula

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **48**
- SRM **4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

### Steps

- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **15.8 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **0 min** at **78C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	3 kg (66.7%)	81 %	4
Grain	Pszeniczny	1 kg (22.2%)	85 %	4
Grain	Płatki owsiane	0.5 kg (11.1%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	20 g	60 min	14.6 %
Boil	Zula	80 g	5 min	5.2 %
Przerwa chmielowa 85C - 30min				
Dry Hop	Zula	60 g	3 day(s)	5.2 %
Chmienie na burzliwej w hopspider				
Dry Hop	Zula	60 g	3 day(s)	5.2 %

### Yeasts

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