

55-IPA-03.05.2019

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **58**
- SRM **8.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **14.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **14.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.7 kg (67.5%)	80 %	4
Grain	Karmelowy Czerwony	0.3 kg (7.5%)	75 %	59
Grain	Strzegom Monachijski typ I	1 kg (25%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	8.8 %
Boil	Centennial	30 g	20 min	10.5 %
Aroma (end of boil)	Nelson Sauvín	30 g	1 min	11 %
Dry Hop	Nelson Sauvín	20 g	5 day(s)	11 %
Dry Hop	Centennial	20 g	5 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Mangrove Jack's M44 US West Coast	Ale	Slant	60 ml	Mangrove Jack's
--------------------------------------	-----	-------	-------	-----------------