

## #3 IPA

- Gravity **17.3 BLG**
- ABV ---
- IBU **59**
- SRM **8.5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

### Steps

- Temp **66 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **20.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5.8 kg (86.5%)	80 %	4
Grain	Strzegom Monachijski typ I	0.34 kg (5.1%)	79 %	16
Grain	Caramel/Crystal Malt - 20L	0.45 kg (6.7%)	75 %	39
Grain	Caramel/Crystal Malt - 40L	0.113 kg (1.7%)	74 %	79

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	11.5 %
Boil	Centennial	50 g	10 min	8.5 %
Boil	Simcoe	50 g	5 min	11.4 %
Dry Hop	Amarillo	50 g	3 day(s)	8.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Slant	100 ml	Mangrove Jack's