

# IPA #1

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **50**
- SRM **7.8**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **0 min** at **78C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	0.8 kg (12.7%)	80 %	4
Grain	Strzegom Pale Ale	4 kg (63.5%)	79 %	6
Grain	Karmelowy Czerwony	0.5 kg (7.9%)	75 %	59
Grain	Monachijski	1 kg (15.9%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	40 g	30 min	15.5 %
Boil	HBC 342	10 g	5 min	10.6 %
Boil	Columbus/Tomahawk/Zeus	10 g	5 min	15.5 %
Whirlpool	Cascade	15 g	0 min	6 %
Whirlpool	Eureka!	15 g	0 min	18 %
Whirlpool	HBC 342	15 g	0 min	10.6 %
Dry Hop	Cascade	35 g	4 day(s)	6 %
Dry Hop	HBC 342	25 g	4 day(s)	10.6 %
Dry Hop	eureka	35 g	4 day(s)	18 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
FM52 Amerykański Sen	Ale	Liquid	400 ml	Fermentum Mobile