

## BRO #002.ver.1 American IPA US,05

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **52**
- SRM **6.3**
- 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 **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

### Steps

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

### Mash step by step

- Heat up **18.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.65 kg (59.8%)	79 %	6
Grain	Strzegom Pilzneński	1.82 kg (29.8%)	80 %	4
Grain	Pszeniczny	0.38 kg (6.2%)	85 %	4
Grain	Caramunich® typ I	0.25 kg (4.1%)	73 %	80

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zythos	30 g	60 min	9.2 %
Boil	Nelson Sauvín	25 g	30 min	11 %
Boil	Waimea	30 g	3 min	15 %

### Yeasts

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

### Notes

- Wersja 1. (10L)  
Nelson Sauvín - 10g  
Waimea - 15g 6 dni

Wersja 2. (7L)  
płatki dębowe po czerwonym winie 20g  
Eureka - 15g  
6 dni  
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