

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

- 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  
*Mar 11, 2018, 9:45 AM*