

# Sesyjny Harlem single hop

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **33**
- SRM **36.8**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **16 %/h**
- Boil size **23 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.6 liter(s)**

## Steps

- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **13.4 liter(s)** of strike water to **74.4C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **50 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|---|--------------------------------|----------------|-------|------|
| Grain                                       | Pale Wiking Malt               | 2 kg (47.6%)   | 79 %  | 6    |
| Grain                                       | Pszenica niesłodowana          | 0.5 kg (11.9%) | 70 %  | 2    |
| Temperatura kleikowania pszenicy: 58-64 °C. |                                |                |       |      |
| Grain                                       | Pszeniczny jasny 3,5-6         | 0.5 kg (11.9%) | 82 %  | 5    |
| Grain                                       | Płatki owsiane błyskawiczne    | 0.5 kg (11.9%) | 70 %  | 4    |
| Temperatura kleikowania pszenicy: 53-59 °C  |                                |                |       |      |
| Grain                                       | Caramunich typ III Weyermann   | 0.25 kg (6%)   | 73 %  | 150  |
| Grain                                       | Czekoladowy Ciemny Viking Malt | 0.07 kg (1.7%) | 1 %   | 1000 |
| Grain                                       | Extra Black Bestmalz           | 0.38 kg (9%)   | 1 %   | 1400 |
| Na koniec dekstrynowej                      |                                |                |       |      |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 15 g   | 60 min | 8.8 %      |

|                     |            |       |           |     |
|---------------------|------------|-------|-----------|-----|
| Aroma (end of boil) | Cascade PL | 40 g  | 10 min    | 8 % |
| Dry Hop             | Cascade PL | 110 g | 10 day(s) | 8 % |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory       |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Slant | 300 ml | Fermentum Mobile |

## Extras

| Type        | Name             | Amount | Use for  | Time   |
|-------------|------------------|--------|----------|--------|
| Water Agent | Kwas mlekowy     | 3 g    | Mash     | 60 min |
| Water Agent | Gips piwowarski  | 3 g    | Mash     | 1 min  |
| Other       | Łuska ryżowa     | 75 g   | Mash     | 70 min |
| Other       | HopSpider        | 1 g    | Boil     | 10 min |
| Fining      | Mech irlandzki   | 5 g    | Boil     | 10 min |
| Other       | Chłodnica        | 1 g    | Boil     | 20 min |
| Water Agent | Kwas askorbinowy | 2 g    | Bottling | ---    |

## Notes

- Woda RO + Kran 1:1  
*May 16, 2020, 8:20 PM*
- Dobrze napowietrzyć brzeczke!!  
*May 16, 2020, 8:31 PM*
- Dekokcja 1 warowa:  
|  
Odebrać dekokt 4.5 L przy 67°C.  
Dekokt podgrzać do 72° na 10 min.  
Dekokt gotować przez 20 min.  
Podgrzać dekoktem do 72°  
*May 16, 2020, 8:31 PM*