

# Hops Hops Hops by Krzysztof Kula @piwo.org

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **67**
- SRM **6.2**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale          | 5 kg (83.3%)   | 79 %  | 6   |
| Grain | Strzegom Monachijski typ I | 0.7 kg (11.7%) | 79 %  | 16  |
| Grain | Strzegom Karmel 30         | 0.3 kg (5%)    | 75 %  | 30  |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Amarillo | 35 g   | 60 min   | 9.5 %      |
| Boil                | Amarillo | 25 g   | 30 min   | 9.5 %      |
| Boil                | Amarillo | 30 g   | 15 min   | 9.5 %      |
| Aroma (end of boil) | Amarillo | 10 g   | 1 min    | 9.5 %      |
| Aroma (end of boil) | Cascade  | 20 g   | 1 min    | 6 %        |
| Dry Hop             | Cascade  | 50 g   | 4 day(s) | 6 %        |

## Yeasts

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