

# Czarny łąd

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **87**
- SRM **30.4**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount        | Yield | EBC  |
|-------|----------------------------------|---------------|-------|------|
| Grain | Pilzneński                       | 3 kg (42.3%)  | 81 %  | 4    |
| Grain | Strzegom Pale Ale                | 3 kg (42.3%)  | 79 %  | 6    |
| Grain | Strzegom Monachijski typ I       | 0.5 kg (7%)   | 79 %  | 16   |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.4 kg (5.6%) | 73 %  | 1001 |
| Grain | Weyermann - Dehusked Carafo III  | 0.2 kg (2.8%) | 70 %  | 1024 |

## Hops

| Use for    | Name   | Amount | Time     | Alpha acid |
|------------|--------|--------|----------|------------|
| First Wort | Simcoe | 30 g   | 60 min   | 13.2 %     |
| Boil       | Simcoe | 20 g   | 5 min    | 13.2 %     |
| Whirlpool  | Simcoe | 100 g  | 30 min   | 13.2 %     |
| Dry Hop    | Simcoe | 100 g  | 2 day(s) | 13.2 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                          |     |        |        |             |
|--------------------------|-----|--------|--------|-------------|
| Wyeast - American Ale II | Ale | Liquid | 150 ml | Wyeast Labs |
|--------------------------|-----|--------|--------|-------------|