

# Czarna DUpa

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **47**
- SRM **33.6**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26 liter(s)**
- Total mash volume **34.6 liter(s)**

## Steps

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

## Mash step by step

- Heat up **26 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount        | Yield | EBC  |
|-------|--------------------------|---------------|-------|------|
| Grain | Monachijski              | 5 kg (57.7%)  | 80 %  | 16   |
| Grain | Strzegom Wiedeński       | 2 kg (23.1%)  | 79 %  | 10   |
| Grain | Pilzneński               | 1 kg (11.5%)  | 81 %  | 4    |
| Grain | Palone ziarno jęczmienia | 0.2 kg (2.3%) | --- % | 1200 |
| Grain | chocolate Castle Malting | 0.2 kg (2.3%) | 75 %  | 900  |
| Grain | Black - Castle Malting   | 0.26 kg (3%)  | 55 %  | 1250 |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Hercules | 60 g   | 20 min | 17.3 %     |

## Yeasts

| Name  | Type | Form  | Amount  | Laboratory |
|-------|------|-------|---------|------------|
| us-05 | Ale  | Slant | 1500 ml | fermentis  |

## Notes

- Drożdże dodane 08.07.2022 g. 22.00  
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