

# Robust

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **31**
- SRM **24.9**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **31.2 liter(s)**
- Total mash volume **39 liter(s)**

## Fermentables

| Type  | Name                          | Amount         | Yield | EBC  |
|-------|-------------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński           | 1.8 kg (23.1%) | 80 %  | 4    |
| Grain | Viking Pale Ale malt          | 3 kg (38.5%)   | 80 %  | 5    |
| Grain | Płatki owsiane                | 1.2 kg (15.4%) | 85 %  | 3    |
| Grain | Viking Malt Wędzony Czereśnią | 1 kg (12.8%)   | 82 %  | 10   |
| Grain | Strzegom Karmel 150           | 0.25 kg (3.2%) | 75 %  | 150  |
| Grain | Strzegom Karmel 600           | 0.25 kg (3.2%) | 68 %  | 601  |
| Grain | Strzegom pszenica prażona     | 0.3 kg (3.8%)  | 1 %   | 1000 |

## Hops

| Use for | Name    | Amount | Time      | Alpha acid |
|---------|---------|--------|-----------|------------|
| Boil    | lunga   | 40 g   | 60 min    | 11 %       |
| Dry Hop | Oktawia | 50 g   | 20 day(s) | 7.1 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 7 g    | ---        |