

# Gruit

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU ---
- SRM **14.4**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **33 liter(s)**
- Trub loss --- %
- Size with trub loss **36.3 liter(s)**
- Boil time **60 min**
- Evaporation rate --- %/h
- Boil size --- liter(s)

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34 liter(s)**
- Total mash volume **45.3 liter(s)**

## Steps

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

## Mash step by step

- Heat up **34 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **-22.7 liter(s)** of **76C** water

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 9.29 kg (82%)  | 80 %  | 5   |
| Grain | Weyermann Caramunich 3     | 0.44 kg (3.9%) | 76 %  | 150 |
| Grain | Karmelowy Jasny 30EBC      | 0.36 kg (3.2%) | 75 %  | 30  |
| Grain | Strzegom Monachijski typ I | 0.54 kg (4.8%) | 79 %  | 16  |
| Grain | Oats, Flaked               | 0.5 kg (4.4%)  | 80 %  | 1   |
| Grain | Jęczmień palony            | 0.2 kg (1.8%)  | 55 %  | 985 |

## Yeasts

| Name  | Type | Form   | Amount | Laboratory  |
|-------|------|--------|--------|-------------|
| us-05 | Ale  | Liquid | 22 ml  | Wyeast Labs |

## Extras

| Type | Name             | Amount | Use for | Time   |
|------|------------------|--------|---------|--------|
| Herb | Krwawnik         | 5 g    | Boil    | 60 min |
| Herb | wrzos            | 39.6 g | Boil    | 60 min |
| Herb | wrzos            | 39.6 g | Boil    | 0 min  |
| Herb | bylica pospolita | 39.6 g | Boil    | 60 min |
| Herb | bylica pospolita | 19.8 g | Boil    | 20 min |

|      |          |      |      |       |
|------|----------|------|------|-------|
| Herb | krwawnik | 25 g | Boil | 1 min |
|------|----------|------|------|-------|