

red

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **46**
- SRM **14.8**
- Style **Red IPA**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **40.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **32.3 liter(s)**
- Total mash volume **43 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **32.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **26.7 liter(s)** of **76C** water or to achieve **48.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (37.2%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 5 kg (46.5%) | 79 % | 16 |
| Grain | Pszeniczny | 1.5 kg (14%) | 85 % | 4 |
| Grain | Jęczmień palony | 0.25 kg (2.3%) | 55 % | 1100 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Centennial | 40 g | 60 min | 10 % |
| Boil | Centennial | 40 g | 30 min | 10 % |
| Aroma (end of boil) | Centennial | 40 g | 10 min | 10 % |
| Dry Hop | Centennial | 80 g | 0 day(s) | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 200 ml | Fermentum Mobile |