

ORDYNARNY BITTER DO ŻŁOPANIA

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **32**
- SRM **5.5**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **67 C**, Time **75 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (93%) | 80 % | 5 |
| Grain | Caramunich® typ I | 0.1 kg (2.3%) | 73 % | 80 |
| Grain | Słód Caramunich Typ II Weyermann | 0.2 kg (4.7%) | 73 % | 120 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 30 g | 60 min | 4 % |
| Boil | Fuggles | 30 g | 60 min | 4.5 % |
| Boil | Fuggles | 20 g | 30 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|-------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale | Slant | 100 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|-------|
| Fining | WHIRLFLOC | 1 g | Boil | 5 min |

| | | | | |
|-------------|-----------------|------|------|--------|
| Water Agent | GIPS PIWOWARSKI | 10 g | Mash | 75 min |
|-------------|-----------------|------|------|--------|