

## Zwyczajne

- Gravity **10.5 BLG**
- ABV ---
- IBU **30**
- SRM **4.8**
- Style **Standard/Ordinary Bitter**

### 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **22.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale      | 1 kg (22.2%)  | 79 %  | 6   |
| Grain | Strzegom Pilzneński    | 3 kg (66.7%)  | 80 %  | 4   |
| Grain | Briess - Carapils Malt | 0.3 kg (6.7%) | 74 %  | 3   |
| Grain | Strzegom Bursztynowy   | 0.2 kg (4.4%) | 70 %  | 49  |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 20 g   | 60 min | 10.5 %     |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g   | 20 min | 3.5 %      |
| Aroma (end of boil) | Marynka           | 5 g    | 20 min | 10.5 %     |
| Whirlpool           | Lublin (Lubelski) | 20 g   | 0 min  | 3.5 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 30 g   | 0 min  | 3.5 %      |

### Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale  | Slant | 200 ml | Safale     |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlanszki | 10 g   | Boil    | 15 min |