

## #25

- Gravity **13.1 BLG**
- ABV ---
- IBU **37**
- SRM **13**
- Style **Special/Best/Premium 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **50 C**, Time **20 min**
- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **77 C**, Time **2 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **2 min** at **77C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (50%)    | 80 %  | 4   |
| Grain | Strzegom Wiedeński  | 1 kg (16.7%)  | 79 %  | 10  |
| Grain | Monachijski         | 1.5 kg (25%)  | 80 %  | 16  |
| Grain | Strzegom Karmel 150 | 0.5 kg (8.3%) | 75 %  | 150 |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Magnum            | 25 g   | 60 min | 13 %       |
| Boil    | Spalt Spalter     | 20 g   | 20 min | 3.5 %      |
| Boil    | Spalt Spalter     | 30 g   | 0 min  | 3.4 %      |
| Boil    | Lublin (Lubelski) | 10 g   | 20 min | 3.5 %      |

### Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 05 | Ale  | Dry  | 11 g   | s          |