

## #30 Rye Beer

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **23**
- SRM **4.1**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

### Mash information

- Mash efficiency **94 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **67 C**, Time **0 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **0 min** at **67C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Słodownia Strzegom<br>- pale ale | 3 kg (66.7%)   | 71 %  | 6   |
| Grain | Słodownia Strzegom<br>- żytni    | 1.5 kg (33.3%) | 81 %  | 5   |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Centennial | 25 g   | 60 min | 8.5 %      |
| Aroma (end of boil) | Galena     | 25 g   | 0 min  | 12.6 %     |
| Aroma (end of boil) | Centennial | 25 g   | 0 min  | 8.5 %      |

### Yeasts

| Name                | Type | Form    | Amount | Laboratory       |
|---------------------|------|---------|--------|------------------|
| FM50 - Kłosy Kansas | Ale  | Culture | 200 g  | Fermentum Mobile |