

## Juž polane stoi żyto

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **14**
- SRM **4.9**
- Style **Roggenbier**

### 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 **73 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Żytni                | 3.5 kg (53.8%) | 85 %  | 8   |
| Grain | Viking Pale Ale malt | 3 kg (46.2%)   | 80 %  | 5   |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Marynka               | 15 g   | 60 min | 10 %       |
| Boil    | Saaz (Czech Republic) | 10 g   | 10 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 10 g   | 0 min  | 4.5 %      |

### Yeasts

| Name | Type  | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| T-54 | Wheat | Dry  | 11 g   | fermentis  |