

Podwędzane żyto

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **14**
- SRM **13.9**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.4 liter(s)**
- Total mash volume **24.5 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 **18.4 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 **16.7 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Żytni | 2.5 kg (40.8%) | 85 % | 8 |
| Grain | Weyermann - Smoked Malt | 1 kg (16.3%) | 81 % | 6 |
| Grain | Strzegom Monachijski typ I | 1 kg (16.3%) | 79 % | 16 |
| Grain | Pilzneński | 0.78 kg (12.7%) | 81 % | 4 |
| Grain | Weyermann - Pale Wheat Malt | 0.5 kg (8.2%) | 85 % | 5 |
| Grain | Caraaroma | 0.3 kg (4.9%) | 78 % | 400 |
| Grain | Carafa II | 0.05 kg (0.8%) | 70 % | 812 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Mandarina Bavaria | 10 g | 60 min | 10 % |
| Boil | Mandarina Bavaria | 10 g | 15 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------|-------|-----|------|-----|
| wb-06 | Wheat | Dry | 11 g | --- |
|-------|-------|-----|------|-----|