

Żytnie

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **20**
- SRM **12.8**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **47 C**, Time **40 min**
- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **79 C**, Time **1 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **50.8C**
- Add grains
- Keep mash **40 min** at **47C**
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **79C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Żytni | 2 kg (39.2%) | 85 % | 8 |
| Grain | Strzegom Pilzneński | 1.6 kg (31.4%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.8 kg (15.7%) | 79 % | 22 |
| Grain | Strzegom Karmel 300 | 0.2 kg (3.9%) | 70 % | 299 |
| Grain | Strzegom Karmel 600 | 0.1 kg (2%) | 68 % | 601 |
| Grain | Pszeniczny | 0.4 kg (7.8%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Perle | 20 g | 70 min | 5 % |
| Boil | Perle | 20 g | 30 min | 5 % |
| Boil | Perle | 5 g | 10 min | 5 % |

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------------|-------------|---------------|-------------------|
| Fermentis Safbrew w | Ale | Dry | 11.5 g | Safale |