

Ale pszen-żytnie

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **18**
- SRM **3.7**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **66 C**, Time **50 min**
- Temp **70 C**, Time **20 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **70C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński | 3.5 kg (70%) | 80 % | 4 |
| Grain | Pszeniczny | 0.5 kg (10%) | 85 % | 4 |
| Grain | Żytni | 0.5 kg (10%) | 85 % | 8 |
| Grain | Monachijski | 0.5 kg (10%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 65 min | 9.5 % |
| Whirlpool | Citra | 50 g | 0 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|--------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Liquid | 500 ml | Fermentum Mobile |