

Stout Żytńi

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **36**
- SRM **32.8**
- Style **Dry Stout**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **52 C**, Time **5 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 3 kg (50%) | 80 % | 4 |
| Grain | Żytńi | 2 kg (33.3%) | 85 % | 8 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (4.2%) | 68 % | 1200 |
| Grain | Strzegom Karmel 300 | 0.5 kg (8.3%) | 70 % | 299 |
| Grain | Strzegom pszenica prażona | 0.25 kg (4.2%) | 70 % | 1393 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 35 g | 60 min | 8.8 % |
| Aroma (end of boil) | Marynka | 30 g | 10 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale | Slant | 200 ml | Fermentum Mobile |