

Żytni Stout 12'Blg

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **35**
- SRM **26.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.3 liter(s)**
- Total mash volume **37.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **28.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **31.8 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Maris Otter Crisp | 7 kg (74.1%) | 83 % | 6 |
| Grain | Caramel/Crystal Malt - 40L | 1.5 kg (15.9%) | 74 % | 150 |
| Grain | Fawcett - Pale Chocolate | 0.5 kg (5.3%) | 71 % | 600 |
| Grain | Carafa | 0.2 kg (2.1%) | 70 % | 1300 |
| Grain | Weyermann - Chocolate Rye | 0.25 kg (2.6%) | 20 % | 600 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Chinook | 25 g | 60 min | 13 % |
| Boil | Citra | 25 g | 30 min | 12 % |
| Aroma (end of boil) | Citra | 25 g | 5 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--|------|------|--------|------------|
| Mangrove Jack's M42 New World Strong Ale | Ale | Dry | 10 g | MJ |