

stout Jesienny

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **32**
- SRM **35.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **18.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **18.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|--------|------|
| Grain | Weyermann - Pale Ale Malt | 2 kg (52.6%) | 85 % | 7 |
| Grain | Pszeniczny | 0.5 kg (13.2%) | 85 % | 4 |
| Grain | Pilzneński | 0.5 kg (13.2%) | 81 % | 3 |
| Grain | pszeniczny czekoladowy Weyermann® | 0.1 kg (2.6%) | 65 % | 1100 |
| Grain | Jęczmień palony | 0.1 kg (2.6%) | 55 % | 1100 |
| Grain | Special B Malt | 0.2 kg (5.3%) | 65.2 % | 315 |
| Grain | Caraaroma | 0.2 kg (5.3%) | 78 % | 400 |
| Grain | Weyermann - Carafa I | 0.2 kg (5.3%) | 70 % | 690 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Fuggles | 50 g | 60 min | 4.5 % |