

ESB Homebeer

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **44**
- SRM **6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **2 %**
- Size with trub loss **12.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.4 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **73 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **7.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **73C**
- Keep mash **1 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 2 kg (76.9%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (19.2%) | 79 % | 22 |
| Grain | Strzegom Bursztynowy | 0.1 kg (3.8%) | 70 % | 49 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Challenger | 30 g | 60 min | 7 % |
| Boil | Saaz (Czech Republic) | 15 g | 5 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 100 ml | Fermentis |