

Esb nøgne

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **12**
- SRM **9.5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **52 liter(s)**
- Trub loss **5 %**
- Size with trub loss **54.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **65.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **31.7 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **23.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **10 min** at **73C**
- Sparge using **49.9 liter(s)** of **76C** water or to achieve **65.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Maris Otter Crisp | 7 kg (83%) | 83 % | 6 |
| Grain | Amber Malt | 0.23 kg (2.7%) | 75 % | 90 |
| Grain | Simpsons - Crystal Extra Dark | 0.7 kg (8.3%) | 74 % | 300 |
| Sugar | Cukier | 0.5 kg (5.9%) | 100 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-----------|--------|--------|------------|
| Boil | Tradition | 30 g | 60 min | 6 % |
| Whirlpool | Tradition | 40 g | 20 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--|------|------|--------|------------|
| Lallemand - Lalbrew London English-style | Ale | Dry | 22 g | Lallemand |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------|--------|---------|--------|
| Water Agent | Gips | 7 g | Mash | 60 min |

| | | | | |
|-------------|--------------|-----|------|-------|
| Water Agent | Kwas mlekowy | 4 g | Mash | 5 min |
|-------------|--------------|-----|------|-------|