

English Lager

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **39**
- SRM **4.6**
- Style **English IPA**

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 **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **51 C**, Time **15 min**
- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|-------------|-------|-----|
| Grain | Castle Pale Ale | 5 kg (100%) | 80 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Magnum | 10 g | 40 min | 10.5 % |
| Boil | lunga | 20 g | 40 min | 10.5 % |
| Boil | Fuggles | 20 g | 15 min | 5.3 % |
| Boil | East Kent Goldings | 20 g | 15 min | 4.7 % |
| Boil | Fuggles | 30 g | 5 min | 5.3 % |
| Boil | East Kent Goldings | 30 g | 5 min | 4.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|-------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Slant | 200 ml | Fermentum Mobile |