

bitter113

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **40**
- SRM **11.8**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.3 liter(s)**
- Total mash volume **17.7 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Maris Otter Crisp | 4 kg (90.5%) | 83 % | 6 |
| Grain | Caramel/Crystal Malt - 80L | 0.2 kg (4.5%) | 74 % | 170 |
| Grain | Caramel/Crystal Malt - 120L | 0.2 kg (4.5%) | 72 % | 270 |
| Grain | Jęczmień palony | 0.02 kg (0.5%) | 55 % | 1100 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------------|--------|--------|------------|
| Boil | Simcoe | 15 g | 60 min | 12.8 % |
| Boil | Simcoe | 15 g | 20 min | 12.8 % |
| Whirlpool | East Kent Goldings | 25 g | 5 min | 4.5 % |