

Special Bitter

- Gravity **10 BLG**
- ABV **4 %**
- IBU **28**
- SRM **5.8**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **65 min**
- Evaporation rate **13 %/h**
- Boil size **13.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **7.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **17 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **0.1 liter(s)** of **76C** water or to achieve **13.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.5 kg (75%) | 80 % | 6 |
| Grain | Viking Monach II | 0.3 kg (15%) | 79 % | 20 |
| Grain | Viking Pale Cookie (bursztynowy) | 0.1 kg (5%) | 72 % | 25 |
| Grain | Viking Caramel Sweet | 0.1 kg (5%) | 75 % | 62 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Iunga Polish Hops | 4 g | 60 min | 10 % |
| Boil | Simcoe | 5 g | 30 min | 11.7 % |
| Boil | Simcoe | 7 g | 10 min | 11.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|--------|---------|------------|
| WLP004 - Irish Ale Yeast | Ale | Liquid | 1000 ml | White Labs |