

Special Bitter

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **31**
- SRM **7.2**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.2 kg (93.3%) | 80 % | 5 |
| Grain | Strzegom Karmel 150 | 0.3 kg (6.7%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------------|--------|--------|------------|
| Boil | Magnum | 15 g | 60 min | 13.5 % |
| Boil | East Kent Goldings | 25 g | 10 min | 5.1 % |
| Whirlpool | East Kent Goldings | 30 g | 10 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Fermentis |