

## #66 Bitter

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **7.7**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **17 %/h**
- Boil size **28.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

### Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt   | 2.5 kg (52.1%) | 80 %  | 5   |
| Grain | Golden ale Viking malt | 2 kg (41.7%)   | 78 %  | 10  |
| Grain | Strzegom Karmel 150    | 0.3 kg (6.3%)  | 75 %  | 150 |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Challenger | 30 g   | 60 min | 7 %        |
| Aroma (end of boil) | Fuggles    | 30 g   | 0 min  | 4.5 %      |

### Yeasts

| Name                  | Type | Form  | Amount | Laboratory |
|-----------------------|------|-------|--------|------------|
| Lalleemand nottingham | Ale  | Slant | 200 ml | ---        |