

## OLD ALE

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **40**
- SRM **20.4**
- Style **Old Ale**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **31 liter(s)**

### Fermentables

| Type  | Name                           | Amount         | Yield  | EBC |
|-------|--------------------------------|----------------|--------|-----|
| Grain | Viking Pilsner malt            | 4 kg (48.2%)   | 82 %   | 4   |
| Grain | Strzegom Pilzneński            | 1.6 kg (19.3%) | 80 %   | 4   |
| Grain | Abbey Castle                   | 1 kg (12%)     | 80 %   | 45  |
| Grain | Brown Malt (British Chocolate) | 0.2 kg (2.4%)  | 70 %   | 190 |
| Grain | Carabelge                      | 0.35 kg (4.2%) | 80 %   | 30  |
| Grain | Simpsons - Crystal Rye         | 0.4 kg (4.8%)  | 73 %   | 177 |
| Grain | Special B Malt                 | 0.1 kg (1.2%)  | 65.2 % | 315 |
| Grain | Special X Malt                 | 0.1 kg (1.2%)  | 65.2 % | 315 |
| Sugar | Molasses                       | 0.55 kg (6.6%) | 78.3 % | 158 |

### Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 23 g   | 60 min | 17.1 %     |
| Boil    | Nugget                 | 12 g   | 30 min | 13 %       |

### Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM12 W szkocką kratę | Ale  | Liquid | 200 ml | Fermentum Mobile |
| Safale US-05         | Ale  | Dry    | 11 g   | Fermentis        |