

## belgian stout

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- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **31**
- SRM **18.6**
- Style **Belgian Specialty Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **14.3 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt           | 3 kg (63.2%)   | 80 %  | 5    |
| Grain | Pszeniczny                     | 1 kg (21.1%)   | 85 %  | 4    |
| Grain | Carabelge                      | 0.5 kg (10.5%) | 80 %  | 30   |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.15 kg (3.2%) | 68 %  | 1200 |
| Grain | Jęczmień palony                | 0.1 kg (2.1%)  | 55 %  | 985  |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnat | 30 g   | 60 min | 9.8 %      |

### Yeasts

| Name                 | Type | Form  | Amount | Laboratory       |
|----------------------|------|-------|--------|------------------|
| FM21 Odkrycie sezonu | Ale  | Slant | 200 ml | Fermentum Mobile |

### Extras

| Type  | Name      | Amount | Use for | Time  |
|-------|-----------|--------|---------|-------|
| Spice | kolendera | 10 g   | Boil    | 5 min |

|       |                  |     |      |       |
|-------|------------------|-----|------|-------|
| Spice | extrat waniliowy | 1 g | Boil | 5 min |
|-------|------------------|-----|------|-------|