

Bohemskie ciemne

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **19.5**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **5.2 liter(s) / kg**
- Mash size **26.5 liter(s)**
- Total mash volume **31.6 liter(s)**

Steps

- Temp **66.6 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **26.5 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **90 min** at **66.6C**
- Keep mash **10 min** at **78C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Malteurop Pale Ale | 2.5 kg (49%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 2 kg (39.2%) | 79 % | 16 |
| Grain | Strzegom Karmel 150 | 0.25 kg (4.9%) | 75 % | 150 |
| Grain | Strzegom Karmel 600 | 0.25 kg (4.9%) | 68 % | 601 |
| Grain | Weyermann - Dehusked Carafa II | 0.1 kg (2%) | 70 % | 837 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|-----------------------|--------|--------|------------|
| First Wort | Tradition | 20 g | 80 min | 5.2 % |
| First Wort | Tradition | 5 g | 30 min | 5.5 % |
| Boil | Saaz (Czech Republic) | 25 g | 30 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 25 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|------------------------|-------|-------|-----------|------------------|
| FM30 Bohemska rapsodia | Lager | Slant | 188.68 ml | Fermentum Mobile |
|------------------------|-------|-------|-----------|------------------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 3.77 g | Boil | 15 min |