

## #70 Quadrupel

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **25**
- SRM **13.2**

### 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 **25.5 liter(s)**
- Total mash volume **34 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **30 min**

### Mash step by step

- Heat up **25.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **30 min** at **76C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Wiedeński          | 4 kg (44.4%)  | 79 %  | 10   |
| Grain | Strzegom Pilzneński         | 4 kg (44.4%)  | 80 %  | 4    |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (1.1%) | 68 %  | 1200 |
| Grain | cookie                      | 0.4 kg (4.4%) | --- % | ---  |
| Sugar | Cukier kandyzowany ciemny   | 0.5 kg (5.6%) | --- % | ---  |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Challenger            | 50 g   | 50 min | 7 %        |
| Boil    | Saaz (Czech Republic) | 30 g   | 5 min  | 4.5 %      |

### Yeasts

| Name  | Type | Form  | Amount | Laboratory       |
|-------|------|-------|--------|------------------|
| FM 26 | Ale  | Slant | 300 ml | Fermentum mobile |