

# Quadrupel

- Gravity **29.3 BLG**
- ABV **14.4 %**
- IBU **31**
- SRM **17**
- Style **Belgian Dark Strong Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **40 liter(s)**
- Total mash volume **56 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **15 min**
- Temp **74 C**, Time **30 min**

## Mash step by step

- Heat up **40 liter(s)** of strike water to **48.8C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **74C**
- Keep mash **15 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount       | Yield | EBC |
|-------|-----------------------------|--------------|-------|-----|
| Grain | Strzegom Wiedeński          | 3 kg (18.8%) | 79 %  | 10  |
| Grain | Strzegom Monachijski typ II | 3 kg (18.8%) | 79 %  | 22  |
| Grain | Strzegom Bursztynowy        | 3 kg (18.8%) | 70 %  | 49  |
| Grain | Strzegom Pilzneński         | 6 kg (37.5%) | 80 %  | 4   |
| Grain | Strzegom Karmel 30          | 1 kg (6.3%)  | 75 %  | 30  |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 100 g  | 60 min | 7 %        |

## Yeasts

| Name                     | Type | Form | Amount | Laboratory |
|--------------------------|------|------|--------|------------|
| Fermentis Safbrew BE-256 | Ale  | Dry  | 11.5 g | Fermentis  |