

# Quadrupel

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **21**
- SRM **14**
- 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 **90 min**
- Evaporation rate **10 %/h**
- Boil size **34.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

## Fermentables

| Type    | Name                 | Amount         | Yield | EBC |
|---------|----------------------|----------------|-------|-----|
| Grain   | Viking Pale Ale malt | 7 kg (72.9%)   | 80 %  | 5   |
| Adjunct | Cukier trzcinowy     | 1.5 kg (15.6%) | --- % | --- |
| Grain   | Czekoladowy          | 0.2 kg (2.1%)  | 60 %  | 788 |
| Grain   | Karmelowy            | 0.2 kg (2.1%)  | --- % | 150 |
| Grain   | Cookie               | 0.2 kg (2.1%)  | --- % | 50  |
| Grain   | Strzegom Wiedeński   | 0.5 kg (5.2%)  | 79 %  | 10  |

## Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Northern Brewer       | 40 g   | 15 min | 9 %        |
| Aroma (end of boil) | Saaz (Czech Republic) | 20 g   | 75 min | 4.5 %      |
| Aroma (end of boil) | Saaz (Czech Republic) | 10 g   | 85 min | 4.5 %      |

## Yeasts

| Name                            | Type | Form | Amount | Laboratory      |
|---------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M41 Belgian Ale | Ale  | Dry  | 23 g   | Mangrove Jack's |