

Noel

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **18**
- SRM **17.7**
- Style **Belgian Dubbel**

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 **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.1 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **70 C**, Time **15 min**

Mash step by step

- Heat up **20.3 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **15 min** at **70C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|--------|-----|
| Grain | Strzegom Pilzneński | 4.5 kg (66.2%) | 80 % | 4 |
| Grain | cookie | 0.5 kg (7.4%) | 78 % | 51 |
| Grain | Pszeniczny | 0.3 kg (4.4%) | 85 % | 4 |
| Grain | Strzegom Karmel 300 | 0.3 kg (4.4%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy jasny | 0.2 kg (2.9%) | 68 % | 400 |
| Sugar | Candi Sugar, Amber | 0.5 kg (7.4%) | 78.3 % | 148 |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (7.4%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 65 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|-------|--------|------------|
| WLP530 - Abbey Ale Yeast | Ale | Slant | 500 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-------------------|--------|-----------|----------|
| Spice | skórka pomarańczy | 10 g | Boil | 10 min |
| Spice | wanilia laska | 10 g | Secondary | 2 day(s) |