

# 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) |