

BPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **6**
- Style **Belgian Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **51 C**, Time **10 min**
- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **20 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **21.3 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pale ale (Malteurop) | 3.2 kg (61.5%) | 80 % | 7 |
| Grain | Strzegom Monachijski typ I | 1 kg (19.2%) | 79 % | 16 |
| Grain | Pszeniczny | 0.5 kg (9.6%) | 85 % | 4 |
| Grain | Strzegom Karmel 30 | 0.25 kg (4.8%) | 75 % | 30 |
| Grain | Abbey Malt Weyermann | 0.25 kg (4.8%) | 75 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Iunga | 20 g | 60 min | 11 % |
| Boil | Lublin (Lubelski) | 30 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------------|------|------|--------|------------|
| Gozdawa Belgian Fruit Spicy Ale Yeast | Ale | Dry | 11 g | Gozdawa |