

Belgian IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **59**
- SRM **6.1**
- Style **Belgian IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **4.3 liter(s) / kg**
- Mash size **26.9 liter(s)**
- Total mash volume **33.1 liter(s)**

Steps

- Temp **55 C**, Time **20 min**
- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **26.9 liter(s)** of strike water to **59.1C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **35 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|--------|-----|
| Grain | Strzegom Pale Ale | 3.5 kg (52.8%) | 79 % | 6 |
| Grain | Strzegom Pszeniczny | 1.5 kg (22.6%) | 81 % | 6 |
| Grain | Żytni | 1 kg (15.1%) | 85 % | 8 |
| Grain | Strzegom Karmel 30 | 0.25 kg (3.8%) | 75 % | 30 |
| Sugar | Turbinado | 0.38 kg (5.7%) | 95.7 % | 20 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|------------------------|--------|----------|------------|
| First Wort | Columbus/Tomahawk/Zeus | 18 g | 80 min | 15.8 % |
| Boil | Equinox | 12 g | 80 min | 16 % |
| Boil | Simcoe | 25 g | 3 min | 13.2 % |
| Boil | Mosaic | 25 g | 3 min | 11.8 % |
| Boil | Equinox | 25 g | 3 min | 16 % |
| Boil | Palisade | 25 g | 3 min | 6.1 % |
| Dry Hop | Centennial | 30 g | 7 day(s) | 9.7 % |
| Dry Hop | Cascade | 30 g | 7 day(s) | 7.1 % |

| | | | | |
|---------|----------|------|----------|-------|
| Dry Hop | Amarillo | 15 g | 7 day(s) | 9.5 % |
|---------|----------|------|----------|-------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM21 Odkrycie sezonu | Ale | Liquid | 150 ml | Fermentum Mobile |

Notes

- 100 wody RO, ideal pale ale profile
Ca=90, Mg=20, Na=16, Cl=48, S04=246
Dec 28, 2017, 4:07 PM