

# Belgia na Start!

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **18**
- SRM **3.9**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

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

## Mash step by step

- Heat up **11.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **70 min** at **62C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Malt Pilsneński   | 3 kg (80%)     | 80 %  | 4   |
| Grain | Viking Malt Pszczeniczny | 0.5 kg (13.3%) | 82 %  | 5   |
| Grain | Viking Malt Żytmi        | 0.25 kg (6.7%) | 75 %  | 40  |

## Hops

| Use for | Name             | Amount | Time     | Alpha acid |
|---------|------------------|--------|----------|------------|
| Boil    | Amarillo US 2017 | 5 g    | 60 min   | 9 %        |
| Boil    | Comet US 2017    | 4 g    | 60 min   | 8.4 %      |
| Boil    | Citra US 2017    | 4 g    | 60 min   | 9 %        |
| Boil    | Idaho US 2017    | 4 g    | 60 min   | 9 %        |
| Dry Hop | Amarillo US 2017 | 86 g   | 3 day(s) | 9 %        |
| Dry Hop | Comet US 2017    | 46 g   | 3 day(s) | 8.4 %      |
| Dry Hop | Citra US 2017    | 46 g   | 3 day(s) | 9 %        |
| Dry Hop | Idaho US 2017    | 46 g   | 3 day(s) | 9 %        |

## Yeasts

| Name                     | Type | Form   | Amount  | Laboratory |
|--------------------------|------|--------|---------|------------|
| FM27 Artefakty Trapistów | Ale  | Liquid | 1000 ml | FM         |

## Notes

- 1/2 warki bez dodatków  
1/2 warki z chmieleniem na zimno - może jakieś NZ?  
*Dec 9, 2018, 11:31 PM*