

# Stout

- Gravity **13 BLG**
- ABV ---
- IBU **28**
- SRM **40**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **2 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **25.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.6 liter(s)**

## Steps

- Temp **65 C**, Time **75 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **15.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Keep mash **10 min** at **77C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC  |
|-------|---------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale         | 4.6 kg (89.3%) | 79 %  | 6    |
| Grain | Strzegom Jęczmień palony  | 0.2 kg (3.9%)  | 55 %  | 985  |
| Grain | Strzegom pszenica prażona | 0.2 kg (3.9%)  | 70 %  | 1000 |
| Grain | Strzegom Barwiący         | 0.15 kg (2.9%) | 68 %  | 1300 |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 45 min | 8 %        |
| Boil    | Lublin (Lubelski) | 30 g   | 15 min | 3 %        |

## Yeasts

| Name                            | Type | Form | Amount | Laboratory      |
|---------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M27 Belgian Ale | Ale  | Dry  | 11 g   | Mangrove Jack's |

## Notes

- Warka 3  
warzenie: 9.12.2015  
butelkowanie: 29.12.2015  
cukier 130 g

30 butelek  
9 butelek 9 L  
alkohol: 6,2%  
*Feb 7, 2016, 3:28 PM*