

# porter

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **33**
- SRM **25.5**
- Style **Baltic Porter**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **20.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **27.7 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **20 min**

## Mash step by step

- Heat up **21.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **20 min** at **72C**
- Keep mash **20 min** at **76C**
- Sparge using **4.8 liter(s)** of **76C** water or to achieve **20.1 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Pilzneński                     | 2 kg (32.5%)   | 81 %  | 4    |
| Grain | Monachijski                    | 3.7 kg (60.2%) | 80 %  | 16   |
| Grain | Karmelowy Jasny<br>30EBC       | 0.2 kg (3.3%)  | 75 %  | 30   |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.15 kg (2.4%) | 68 %  | 1200 |
| Grain | Barwiący                       | 0.1 kg (1.6%)  | 55 %  | 985  |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 60 min | 10 %       |
| Boil    | Lublin (Lubelski) | 15 g   | 10 min | 4 %        |

## Yeasts

| Name | Type  | Form  | Amount | Laboratory |
|------|-------|-------|--------|------------|
| saf1 | Lager | Slant | 100 ml | ---        |

## Notes

- barwiący po uzyskaniu negatywnej próby jodowej na 15 min w temp. 72 st  
*Oct 16, 2017, 10:28 AM*