

Stout czekoladowy

- Gravity **15.2 BLG**
- ABV ---
- IBU **51**
- SRM **28.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2.75 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **66 C**, Time **75 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.5 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (64.1%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 2 kg (25.6%) | 79 % | 16 |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (2.6%) | 75 % | 30 |
| Grain | Strzegom Karmel 150 | 0.2 kg (2.6%) | 75 % | 150 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.6%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.2 kg (2.6%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 50 g | 60 min | 9.1 % |
| Boil | Lublin (Lubelski) | 25 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|----------------------------|-----|-------|--------|---------|
| Gozdawa - Pure Ale Yeast 7 | Ale | Slant | 100 ml | Gozdawa |
|----------------------------|-----|-------|--------|---------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|-----------|----------|
| Flavor | Łuska kakaowca | 150 g | Secondary | 5 day(s) |
| Flavor | Łuska kakaowca | 50 g | Boil | 10 min |