

Stout Czekoladowy

- Gravity **20.9 BLG**
- ABV ---
- IBU **22**
- SRM **66**
- Style **Foreign Extra 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **32.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **24.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|-----------------|-------|------|
| Grain | Strzegom Pilzneński | 5.25 kg (65.2%) | 80 % | 4 |
| Grain | Monachijski | 0.6 kg (7.5%) | 80 % | 16 |
| Grain | Pszeniczny | 0.3 kg (3.7%) | 85 % | 4 |
| Grain | Grodziski pszeniczny wędzony dębem | 0.3 kg (3.7%) | 80 % | 3 |
| Grain | Briess - 2 Row Carapils Malt | 0.3 kg (3.7%) | 75 % | 3 |
| Grain | Strzegom Karmel 150 | 0.15 kg (1.9%) | 75 % | 150 |
| Grain | Caraaroma | 0.15 kg (1.9%) | 78 % | 400 |
| Grain | Jęczmień palony | 0.25 kg (3.1%) | 55 % | 985 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.4 kg (5%) | 73 % | 1001 |
| Grain | Czekoladowy | 0.35 kg (4.3%) | 60 % | 788 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------|--------|------|------------|
|---------|------|--------|------|------------|

| | | | | |
|---------------------|-------------------|------|--------|------|
| Boil | Galaxy | 5 g | 60 min | 15 % |
| Aroma (end of boil) | Lublin (Lubelski) | 45 g | 50 min | 4 % |