

Stout czekoladowy

- Gravity **11.7 BLG**
- ABV ---
- IBU **42**
- SRM **54.6**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|------|
| Grain | Pilzneński | 1 kg (41.7%) | --- % | 4 |
| Grain | Strzegom Monachijski typ I | 0.3 kg (12.5%) | --- % | 16 |
| Grain | Strzegom Czekoladowy 1200 | 0.25 kg (10.4%) | --- % | 1202 |
| Grain | Jęczmień palony | 0.1 kg (4.2%) | --- % | 985 |
| Grain | Oats, Flaked | 0.1 kg (4.2%) | --- % | 2 |
| Grain | Barley, Flaked | 0.1 kg (4.2%) | --- % | 4 |
| Grain | Wheat, Flaked | 0.35 kg (14.6%) | --- % | 4 |
| Grain | Strzegom Wiedeński | 0.2 kg (8.3%) | --- % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Magnum | 8 g | 60 min | 13.5 % |
| Boil | Challenger | 10 g | 60 min | 7 % |

Yeasts

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

| | | | | |
|-------------|-----|-------|--------|-----|
| Safale S-04 | Ale | Slant | 500 ml | --- |
|-------------|-----|-------|--------|-----|

Extras

| Type | Name | Amount | Use for | Time |
|-------|-------|--------|---------|--------|
| Spice | cacao | 20 g | Boil | 30 min |