

stout 2

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **33**
- SRM **37.5**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Monachijski typ I | 4 kg (52.6%) | 79 % | 30 |
| Grain | Strzegom Monachijski typ II | 2.5 kg (32.9%) | 79 % | 22 |
| Grain | Caraaroma | 0.5 kg (6.6%) | 78 % | 400 |
| Grain | Czekoladowy bestmalz | 0.3 kg (3.9%) | 68 % | 900 |
| Grain | Jęczmień palony | 0.1 kg (1.3%) | 55 % | 985 |
| Grain | Strzegom Barwiący | 0.2 kg (2.6%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------------------|--------|--------|------------|
| Boil | Magnum goryczkowy | 30 g | 60 min | 11.5 % |
| Boil | East Kent Goldings aromat | 30 g | 15 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 30 g | 5 min | 4 % |

Yeasts

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