

Otter

- Gravity **15 BLG**
- ABV ---
- IBU **32**
- SRM **40**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Pilzneński | 4.5 kg (82.6%) | 81 % | 4 |
| Grain | Strzegom Czekoladowy ciemny | 0.15 kg (2.8%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.25 kg (4.6%) | 55 % | 985 |
| Grain | Carahell | 0.25 kg (4.6%) | 77 % | 26 |
| Grain | Caraaroma | 0.3 kg (5.5%) | 78 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 25 g | 80 min | 8.4 % |
| Boil | Lublin (Lubelski) | 25 g | 30 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|---------|-------|------|--------|
| Flavor | laktoza | 400 g | Boil | 30 min |
|--------|---------|-------|------|--------|