

#10? Wysłodziny po RISie

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **35**
- SRM **32.7**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.15 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.5 liter(s)**

Steps

- Temp **65 C**, Time **80 min**

Mash step by step

- Heat up **8.7 liter(s)** of strike water to **72.2C**
- Add grains
- Keep mash **80 min** at **65C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 1.5 kg (54.2%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.58 kg (20.9%) | 79 % | 16 |
| Grain | Strzegom Karmel 600 | 0.07 kg (2.5%) | 68 % | 601 |
| Grain | Strzegom Czekoladowy jasny | 0.14 kg (5.1%) | 68 % | 400 |
| Grain | Viking melanoidynowy | 0.1 kg (3.6%) | 75 % | 60 |
| Grain | Strzegom Czekoladowy ciemny | 0.12 kg (4.3%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.09 kg (3.2%) | 55 % | 985 |
| Grain | Biscuit Malt | 0.17 kg (6.1%) | 79 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 25 g | 60 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|----------|------------|
| Safale S-04 | Ale | Slant | 10.27 ml | Safale |
| Safale US-05 | Ale | Slant | 10.27 ml | Fermentis |