

## #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