

x - Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **33.3**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **75 C**, Time **1 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **75C**
- Keep mash **60 min** at **100C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (40.8%)	80 %	5
Grain	Pilzneński	1 kg (20.4%)	81 %	4
Grain	Strzegom Monachijski typ I	0.8 kg (16.3%)	79 %	16
Grain	Jęczmień niesłodowany	0.5 kg (10.2%)	75 %	2
Grain	Jęczmień palony	0.35 kg (7.1%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.25 kg (5.1%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	Saaz	10 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	15 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar BRY-97	Ale	Dry	11 g	danstar