Whisky Stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **77**
- SRM **37.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.4 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **25.3 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **74.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking słód wędzony torfem	2 kg *(26.8%)*	81 %	10
Grain	Viking Pilsner malt	2.4 kg *(32.2%)*	82 %	4
Grain	Czekoladowy jasny	0.85 kg *(11.4%)*	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.3 kg *(4%)*	68 %	1200
Grain	Strzegom Karmel 150	0.3 kg *(4%)*	75 %	150
Grain	Viking Caramel Aromatic	1 kg *(13.4%)*	75 %	180
Grain	Płatki jęczmienne	0.6 kg *(8.1%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus (zwietrzały)	25 g	60 min	15.5 %
Boil	Iunga	38 g	60 min	12.4 %
Boil	East Kent Goldings	37 g	10 min	5.1 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	150 ml	---

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	1.5 g	Mash	---