Delikatny stout z czarną porzeczką

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **40**
- SRM **30.3**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	2.3 kg *(63.9%)*	80 %	4
Grain	Viking Pale Ale malt	0.6 kg *(16.7%)*	80 %	5
Grain	Płatki owsiane	0.3 kg *(8.3%)*	60 %	3
Grain	Weyermann - Chocolate Wheat	0.3 kg *(8.3%)*	74 %	788
Grain	Jęczmień palony	0.1 kg *(2.8%)*	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	20 g	5 min	15.5 %

Extras

Type	Name	Amount	Use for	Time
Flavor	puree z czarnej pożeczki	1000 g	Secondary	6 day(s)

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