Bitter V.1

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **32**
- SRM **9.7**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **12.7 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	0.5 kg *(19.7%)*	79 %	6
Grain	Karmelowy Jasny 30EBC	0.3 kg *(11.8%)*	75 %	30
Grain	Strzegom Monachijski typ II	0.2 kg *(7.9%)*	79 %	22
Grain	Strzegom Pilzneński	1.5 kg *(59.1%)*	80 %	4
Grain	Carafa III	0.04 kg *(1.6%)*	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	15 g	60 min	7.8 %
Boil	Oktawia	15 g	10 min	7.8 %
Aroma (end of boil)	Oktawia	20 g	0 min	7.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	7 g	Safale

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