Czarny Sztylet (Black AIPA 16 Twojbrowar.pl)

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **73**
- SRM **33.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **67 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.6 kg *(83.6%)*	80 %	5
Grain	Strzegom Czekoladowy 400	0.4 kg *(7.3%)*	68 %	400
Grain	Chocolate Malt (UK)	0.3 kg *(5.5%)*	73 %	887
Grain	Black (Patent) Malt	0.2 kg *(3.6%)*	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	25 g	60 min	15.5 %
Boil	Dr Rudi	25 g	40 min	11.8 %
Boil	Cascade	30 g	10 min	6 %
Dry Hop	Cascade	50 g	7 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

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