

# Czarny Sztylet (Black AIPA 16 Twojbrowar.pl)

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **74**
- SRM **34.8**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 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 **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **22.8 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