

BLACK AIPA 16

- Gravity **16.1 BLG**
- ABV ---
- IBU **64**
- SRM **58**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **67 C**, Time **15 min**
- Temp **78 C**, Time **8 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **75.7C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **90 min** at **67C**
- Keep mash **8 min** at **78C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.9 kg (80.3%)	79 %	6
Grain	Caramel/Crystal Malt - 40L	0.5 kg (8.2%)	74 %	79
Grain	Strzegom Czekoladowy ciemny	0.4 kg (6.6%)	68 %	1200
Grain	Carafa III	0.3 kg (4.9%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	25 g	60 min	15.5 %
Boil	Dr Rudi	25 g	20 min	11.8 %
Boil	Cascade	30 g	5 min	6 %
Whirlpool	Cascade	50 g	50 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

Extras

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

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	15 min