

# Angielskie bitter

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **51**
- SRM **16.8**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **23.3 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (77.3%)	80 %	5
Grain	caramel pils	1 kg (17.2%)	80 %	5
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.4%)	68 %	1200
Grain	Fawcett - Pale Crystal	0.12 kg (2.1%)	72.8 %	90

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	English Golding	25 g	60 min	4.8 %
Aroma (end of boil)	English Golding	20 g	30 min	4.8 %
Boil	flyer	25 g	60 min	9 %
Aroma (end of boil)	flyer	10 g	30 min	9 %
Aroma (end of boil)	flyer	15 g	10 min	9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US West Coast	Ale	Slant	200 ml	Gozdawa