

# BRETT AMERICAN IPA 16 BLG # 21

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- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **77**
- SRM **6.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **11.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.2 kg (68.8%)	79 %	6
Grain	Strzegom Monachijski typ I	1 kg (31.3%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	70 min	6 %
Boil	Amarillo	20 g	45 min	9.5 %
Boil	Amarillo	20 g	10 min	9.5 %

## Extras

Type	Name	Amount	Use for	Time
Other	Gęstwa Brettanomyces	500 g	Primary	14 day(s)