

American IPA #41

- Gravity **15.4 BLG**
- ABV ---
- IBU **65**
- SRM **6.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **81.9 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.3 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.3 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bestmalz - pilzniejszy	4.75 kg (79.6%)	80.5 %	4
Grain	Bestmalz - pszeniczny	0.6 kg (10.1%)	82 %	4.5
Grain	Bestmalz - monachijski I	0.42 kg (7%)	80 %	16
Grain	Chateau - Crystal	0.2 kg (3.4%)	78 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Topaz	24 g	60 min	15.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	25 g	15 min	12.5 %
Aroma (end of boil)	Centennial	25 g	10 min	9.4 %
Aroma (end of boil)	Simcoe	25 g	5 min	13.1 %
Aroma (end of boil)	Citra	25 g	1 min	12 %
Dry Hop	Centennial	50 g	5 day(s)	9.4 %
Dry Hop	Amarillo	50 g	5 day(s)	7.5 %
Dry Hop	Simcoe	50 g	5 day(s)	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	160 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	3 g	Boil	5 min
Water Agent	gips piwowarski	4 g	Mash	---
Water Agent	chlorek wapnia [ml]	2.6 g	Mash	---
Water Agent	kwas mlekowy 80% [ml]	4.96 g	Mash	---
Water Agent	sól epsom	2 g	Mash	---