

# Chinook + Triumph 2020 ver. 1.0

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **63**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **9 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **16 %/h**
- Boil size **32 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **23.3 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **80 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **80C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **32 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt - Pale Ale	5 kg (94.3%)	80 %	7
Grain	Weyermann - Zakwaszający	0.3 kg (5.7%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook (USA - 2020)	10 g	60 min	12.1 %
Boil	Chinook (USA - 2020)	25 g	20 min	12.1 %
Boil	Triumph (USA - 2020)	25 g	20 min	9.1 %
Boil	Chinook (USA - 2020)	25 g	10 min	12.1 %
Boil	Triumph (USA - 2020)	25 g	10 min	9.1 %
Boil	Triumph (USA - 2020)	50 g	1 min	9.1 %
Boil	Chinook (USA - 2020)	40 g	1 min	12.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	Woda zacieranie (Olsztyńska - Nagórki)	18000 g	Mash	71 min
Other	Woda wysładzanie (Olsztyńska - Nagórki)	17000 g	Mash	71 min
Fining	Whirlfloc T	2 g	Boil	5 min