# Żytko

- Gravity 15.9 BLG
- ABV **6.7** %
- IBU **51**
- SRM **5.8**
- Style American IPA

## **Batch size**

- Expected quantity of finished beer 25 liter(s)
- Trub loss 5 %
- Size with trub loss 27.5 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 33 liter(s)

#### **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 24.9 liter(s)
- Total mash volume 33.2 liter(s)

# **Steps**

- Temp **66 C**, Time **40 min** Temp **72 C**, Time **20 min**
- Temp 76 C, Time 15 min

# Mash step by step

- Heat up 24.9 liter(s) of strike water to 73.7C
- Add grains
- Keep mash 40 min at 66C
- Keep mash 20 min at 72C
- Keep mash 15 min at 76C
- Sparge using 16.4 liter(s) of 76C water or to achieve 33 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg <i>(72.3%)</i>	80 %	5
Grain	Żytni	2 kg <i>(24.1%)</i>	85 %	8
Grain	Carared	0.3 kg <i>(3.6%)</i>	75 %	39

#### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Angus	25 g	60 min	13.9 %
Aroma (end of boil)	Amarillo	60 g	10 min	9.5 %
Aroma (end of boil)	Citra	30 g	10 min	12 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	