

# katowicer

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **43**
- SRM **4.2**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **80 min**
- Evaporation rate **15 %/h**
- Boil size **15.8 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.4 liter(s)**

## Steps

- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **9.6 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **15 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg (80%)	81 %	4
Grain	Weyermann - Carapils	0.15 kg (5.5%)	78 %	4
Grain	Monachijski	0.3 kg (10.9%)	80 %	16
Grain	Acid Malt	0.1 kg (3.6%)	58.7 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	18 g	60 min	11.1 %
Aroma (end of boil)	żatecki	17 g	5 min	3.43 %
Aroma (end of boil)	Hallertau Spalt Select	17 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis