

# grow-JEES-kee-uh imperial

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- Gravity **15.7 BLG**
- ABV ---
- IBU **45**
- SRM **4.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **22.3 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.4 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	6 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	lunga	100 g	60 min	11.6 %
Boil	lunga	30 g	60 min	11.6 %
Boil	lunga	30 g	10 min	11.6 %
Whirlpool	lunga	40 g	20 min	11.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Liquid	200 ml	Fermentum Mobile