

# Wungiel

- Gravity **16.9 BLG**
- ABV ---
- IBU **27**
- SRM **40**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **80 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20.64 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **4 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **77C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **4 min** at **76C**
- Sparge using **-9.4 liter(s)** of **76C** water

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3 kg	81 %	4
Grain	Pilznieński	1 kg	85 %	4
Grain	Pszeniczny	0.75 kg	79 %	4
Adjunct	płatki owsiane błyskawiczne	0.4 kg	70 %	3
Grain	Barwiący	0.35 kg	55 %	1500
Grain	Czekoladowy	0.5 kg	60 %	1200
Grain	Jęczmień palony	0.04 kg	55 %	1333
Sugar	Laktoza	0.7 kg	99 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	7.5 %
Boil	Lublin (Lubelski)	20 g	20 min	3.2 %
Boil	Tradition	30 g	60 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Slant	0.6 ml	Safale
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### Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	750 g	Boil	15 min