

# grand kwas

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- Gravity **20 BLG**
- ABV ---
- IBU **14**
- SRM **13.3**
- Style **Flanders Red Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **4 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.9 liter(s)**

## Steps

- Temp **64 C**, Time **1 min**
- Temp **62 C**, Time **30 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **1 min** at **64C**
- Keep mash **40 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (71.4%)	81 %	4
Grain	Strzegom Monachijski typ II	1 kg (14.3%)	79 %	22
Grain	Płatki pszeniczne	0.5 kg (7.1%)	85 %	3
Grain	Special B Malt	0.25 kg (3.6%)	65.2 %	315
Grain	caramunich	0.25 kg (3.6%)	70 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	30 g	65 min	3.5 %
Boil	Saaz (Czech Republic)	20 g	25 min	3.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
s-33	Ale	Slant	100 ml	fermentis

WLP653 - Brettanomyces lambicus	Ale	Liquid	30 ml	White Labs
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