

# Sorachi Ace Grodziskie APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **31**
- SRM **3.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **19.3 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	3 kg (54.5%)	80 %	3
Grain	Weyermann - Carapils	0.5 kg (9.1%)	78 %	4
Grain	Pszeniczny	2 kg (36.4%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sorachi Ace	15 g	60 min	10 %
Boil	Sorachi Ace	15 g	30 min	10 %
Aroma (end of boil)	Centennial	25 g	5 min	10.5 %
Dry Hop	Sorachi Ace	20 g	10 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Slant	500 ml	Fermentum Mobile