

# Rauch Doppelbock

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **21**
- SRM **17.9**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **15 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **15 min** at **66C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **3.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Wędzony Steinbach	3 kg (50%)	80 %	5
Grain	Strzegom Monachijski typ II	2.8 kg (46.7%)	79 %	22
Grain	Caraaroma	0.2 kg (3.3%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka PH 2019	20 g	40 min	8.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	200 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	chlerek wapnia	5 g	Mash	60 min
Fining	whirlflock	1 g	Boil	5 min