

# GALAXY LORAL RYE ALE

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **33**
- SRM **6**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **30 min**
- Evaporation rate **20 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.1 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **23.1 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.5 kg (50%)	80 %	6
Grain	Weyermann - Rye Malt	3.5 kg (50%)	75 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	20 g	30 min	15 %
Whirlpool	Galaxy	20 g	10 min	15 %
Whirlpool	Loral	30 g	10 min	11.9 %
Dry Hop	Galaxy	60 g	4 day(s)	15 %
Dry Hop	Loral	60 g	4 day(s)	11.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Voss kveik	Ale	Slant	5 ml	House culture

## Extras

Type	Name	Amount	Use for	Time
Other	Łuska ryżowa	300 g	Mash	---