

# Christmas Robust Porter

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **21**
- SRM **29.3**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **70 min**
- Evaporation rate **20 %/h**
- Boil size **16.5 liter(s)**

## Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.35 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15.6 liter(s)**

## Steps

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

## Mash step by step

- Heat up **12 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.2 kg (61.5%)	79 %	6
Grain	Strzegom Monachijski typ II	1 kg (28%)	79 %	22
Grain	Strzegom Karmel 600	0.25 kg (7%)	68 %	601
Grain	Carafa II	0.125 kg (3.5%)	1 %	1100

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lomik	20 g	60 min	6.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	60 ml	Danstar

## Extras

Type	Name	Amount	Use for	Time
Spice	Imbir - świeży	24 g	Boil	10 min
Spice	Cynamon	4 g	Boil	10 min

Spice	Goździki	2 g	Boil	10 min
Spice	Ziele ang.	2 g	Boil	10 min
Water Agent	Kreda	2 g	Mash	60 min

## Notes

- Cynamon - 1 laska, Goździk i ziele ang. po 2szt.  
*Nov 5, 2018, 10:11 AM*