

# Na ralszu

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **13.5**
- Style **Classic Rauchbier**

## Batch size

- Expected quantity of finished beer **28.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.1 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **30.3 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **23.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **36.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	5 kg (74.3%)	80 %	4
Grain	Caramunich® typ I	0.38 kg (5.6%)	73 %	80
Grain	Monachijski	1.2 kg (17.8%)	80 %	16
Grain	Strzegom Czekoladowy ciemny	0.15 kg (2.2%)	68 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	60 g	60 min	4 %
Boil	Lublin (Lubelski)	40 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	300 ml	Danstar

## Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	5 g	Boil	10 min
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