

# "Woda Kolońska"

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **19**
- SRM **3**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **43 C**, Time **0 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **46.8C**
- Add grains
- Keep mash **0 min** at **43C**
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **21.3 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (88.9%)	81 %	4
Grain	Pszeniczny	0.5 kg (11.1%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Golding	25 g	45 min	5 %
Aroma (end of boil)	Goldings	25 g	15 min	6.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	50 ml	Danstar

## Extras

Type	Name	Amount	Use for	Time
Finning	Irish Moss	5 g	Boil	10 min

## Notes

- Słody wsypane w temperaturze 43 stopnie i podgrzane do 63 stopni przy założeniu 1 stopień/ minuta.  
*Dec 6, 2016, 2:33 PM*