

# Kup se u niemca bro

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **36**
- SRM **3.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **25 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **20.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Heidelberg	3.5 kg (51.5%)	80.5 %	2
Grain	Oats, Malted	0.5 kg (7.4%)	80 %	2
Grain	Briess - Wheat Malt, White	0.5 kg (7.4%)	85 %	5
Grain	Oats, Flaked	0.3 kg (4.4%)	80 %	2
Grain	Wheat, Flaked	0.5 kg (7.4%)	77 %	4
Grain	Chit Malt	1.5 kg (22.1%)	50 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Talus	20 g	40 min	8.2 %
Boil	Amarillo	30 g	30 min	9.5 %
Boil	Zula	10 g	5 min	8.3 %
Aroma (end of boil)	Amarillo	20 g	0 min	9.5 %
Whirlpool	Zula	40 g	0 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Lallemand - LalBrew Verdant IPA	Ale	Dry	11 g	Lallemand
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## Notes

- Na bio od razu z drożdżami Talus 30 g  
Potem co 2 dni naprzemiennie talus i amarillo.

Fermentacja 18 C 6 dni

22 C 4 dni

*Nov 16, 2024, 9:14 PM*