

# Klingon Revenge - IPA z truskawkami / dereniem

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **35**
- SRM **6.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **68 C**, Time **80 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (79.4%)	80 %	5
Grain	Monachijski typ I	1 kg (15.9%)	80 %	16
Grain	Viking Caramel Pale	0.3 kg (4.8%)	70 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	30 g	30 min	12.9 %
Boil	cascade DE	10 g	5 min	5.5 %
Boil	Belma	10 g	5 min	9.4 %
Whirlpool	Belma	30 g	0 min	9.4 %
Whirlpool	Cascade De	30 g	0 min	5.5 %
Dry Hop	Belma	40 g	3 day(s)	9.4 %
Dry Hop	Cascade PL	40 g	3 day(s)	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	250 ml	Danstar

## Extras

Type	Name	Amount	Use for	Time
Flavor	Truskawki	2000 g	Secondary	7 day(s)
Fining	Whirflock	5 g	Boil	5 min
Water Agent	NaCl	4.5 g	Mash	0 min
Water Agent	gips piwowarski	4 g	Mash	0 min
Flavor	Dereń	2000 g	Secondary	7 day(s)