

# Odpowiedzialność - Denali Single Hop APA

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **26**
- SRM **10.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **8 %**
- Size with trub loss **23.7 liter(s)**
- Boil time **65 min**
- Evaporation rate **19 %/h**
- Boil size **31.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **25 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Red Active	3 kg (60%)	79 %	35
Grain	Viking Golden Ale	2 kg (40%)	80 %	12

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Denali	20 g	20 min	12 %
Whirlpool	Denali	30 g	20 min	12 %
Dry Hop	Denali	50 g	5 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis