

# Luk - Zielone APA - 12l

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **39**
- SRM **10.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **3 %**
- Size with trub loss **12.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **13.4 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.4 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **10.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **13.4 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Wiedeński         | 2.6 kg (77.6%) | 79 %  | 9   |
| Grain | Viking Monachijski Jasny | 0.25 kg (7.5%) | 78 %  | 16  |
| Grain | Viking Karmelowy 150     | 0.2 kg (6%)    | 75 %  | 150 |
| Grain | Viking Pszeniczny        | 0.1 kg (3%)    | 82 %  | 5   |
| Grain | Viking Żytni             | 0.1 kg (3%)    | 75 %  | 40  |
| Grain | Płatki ryżowe            | 0.1 kg (3%)    | 70 %  | 2   |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Marynka  | 19 g   | 60 min   | 8.5 %      |
| Boil    | Sybilla  | 14 g   | 30 min   | 4.6 %      |
| Boil    | Lubelski | 12 g   | 10 min   | 4.6 %      |
| Dry Hop | Cascade  | 12 g   | 7 day(s) | 6.8 %      |
| Dry Hop | Sybilla  | 7 g    | 7 day(s) | 4.6 %      |
| Dry Hop | Lubelski | 12 g   | 7 day(s) | 4.6 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 5 g    | Fermentis  |

## Extras

| Type   | Name            | Amount | Use for | Time   |
|--------|-----------------|--------|---------|--------|
| Herb   | Trawa cytrynowa | 12 g   | Boil    | 10 min |
| Fining | Irish Moss      | 2 g    | Boil    | 10 min |