

# apa koop

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- Gravity **11.4 BLG**
- ABV ---
- IBU **34**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **57 liter(s)**

## Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **31 liter(s)**

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 7 kg (90.3%)   | 80 %  | 5   |
| Grain | Strzegom Pszeniczny  | 0.75 kg (9.7%) | 81 %  | 6   |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 25 g   | 60 min | 15.5 %     |
| Aroma (end of boil) | Citra                  | 50 g   | 10 min | 12 %       |
| Whirlpool           | Citra                  | 100 g  | ---    | 12 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |