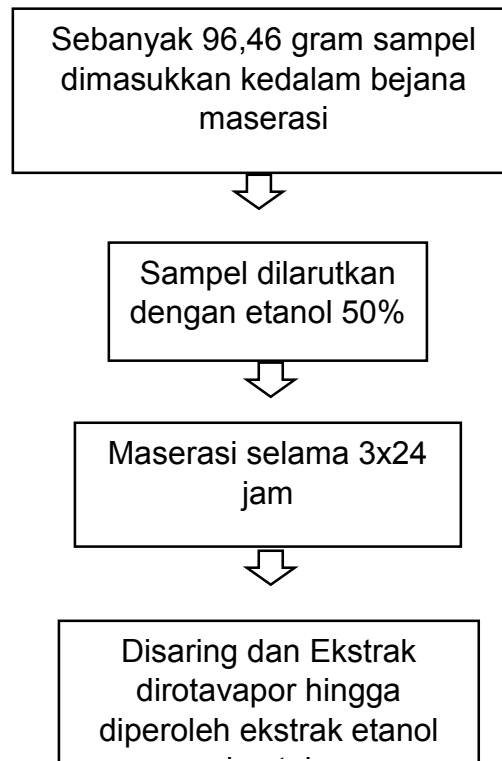


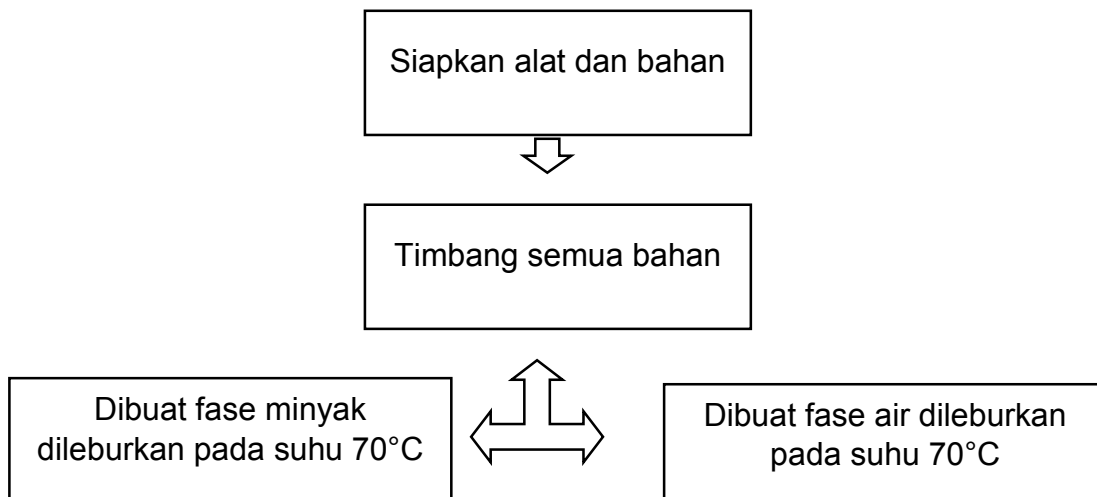
LAMPIRAN

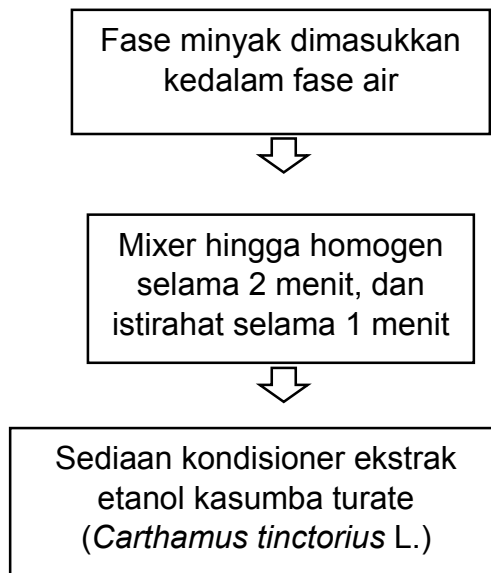
Lampiran 1 : Skema Kerja

1. Pengolahan sampel
2. Ekstraksi sampel



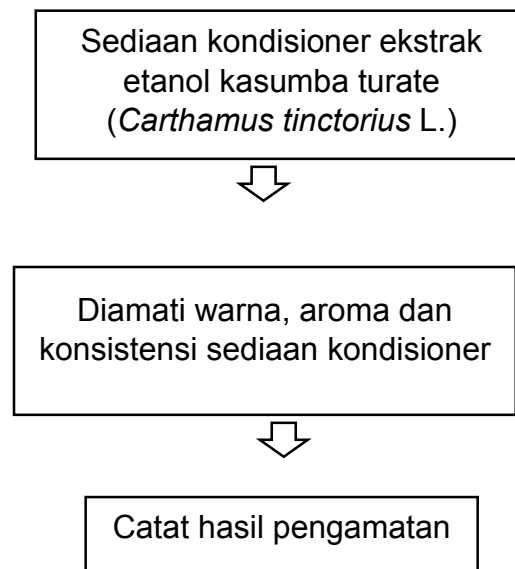
3. Pembuatan sediaan kondisioner



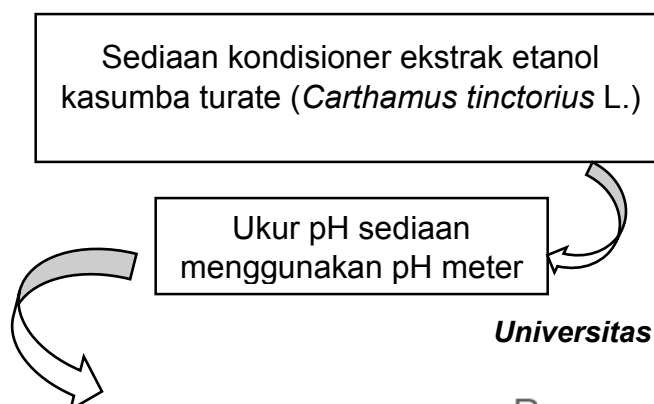


4. Evaluasi Sediaan kondisioner

a. Uji Organoleptik



b. Uji pH



Catat hasil pengamatan

c. Uji Homogenitas

Sediaan kondisioner ekstrak
etanol kasumba turate
(*Carthamus tinctorius* L.)



Oleskan Pada Object Glass
dan Tutup dengan Cover Glass



Catat hasil pengamatan

d. Uji Viskositas dan Tipe Aliran

Sediaan kondisioner ekstrak etanol
kasumba turate (*Carthamus tinctorius* L.)

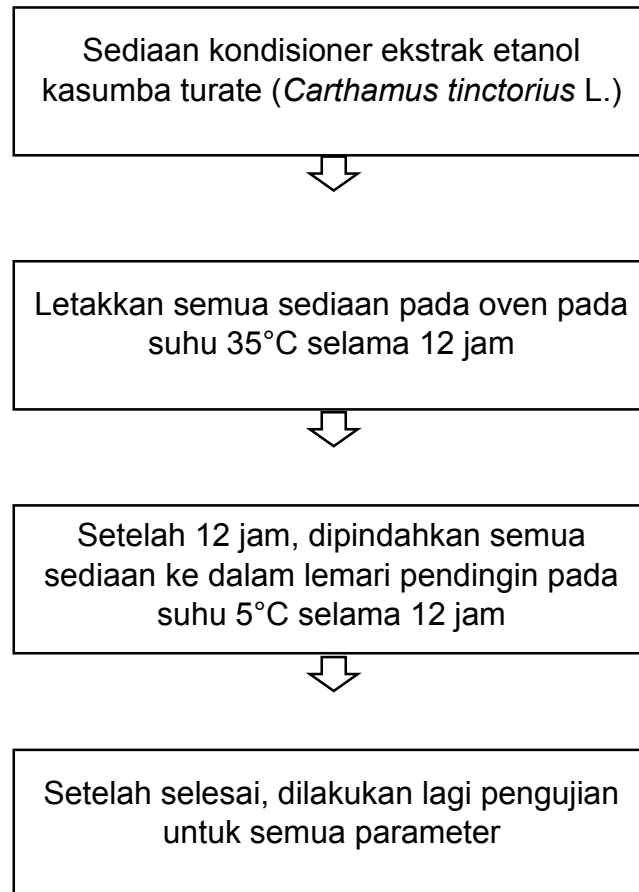
Atur nomor *spindle* dan
kecepatan viskometer

Catat hasil pada
kecepatan 10 RPM

2 RPM 5 RPM 10 RPM 20 RPM 50 RPM 100 RPM

Catat hasil

e. Uji Stabilitas



Lampiran 4. Perhitungan Bahan Formula Anionik Sabun Amin 1, 2 dan 3

Tabel 8. Perhitungan Bahan Formula 1 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearat	4%	$4/100 \times 100 \text{ mL} = 4 \text{ g}$
Trietanolamin	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alcohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 21 \text{ g} = 79 \text{ mL}$

Tabel 9. Perhitungan Bahan Formula 2 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearate	6%	$46/100 \times 100 \text{ mL} = 6 \text{ g}$
Trietanolamin	3%	$3/100 \times 100 \text{ mL} = 3 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alcohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 24 = 76 \text{ mL}$

Tabel 8. Perhitungan Bahan Formula 3 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearate	8%	$8/100 \times 100 \text{ mL} = 8 \text{ g}$
Trietanolamin	4%	$4/100 \times 100 \text{ mL} = 4 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alcohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 27 = 73 \text{ mL}$

Lampiran 5. Perhitungan Bahan Formula Nonionik 1, 2 dan 3

Tabel 9. Perhitungan Bahan Formula 1 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearate	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Tween 80	3%	$3/100 \times 100 \text{ mL} = 3 \text{ g}$ $98,05/100 \times 3 \text{ g} = 2,941 \text{ g}$
Span 60	3%	$3/100 \times 100 \text{ mL} = 3 \text{ g}$ $1,5/100 \times 3 \text{ g} = 0,045 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alcohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 29 = 71 \text{ mL}$

Tabel 10. Perhitungan Bahan Formula 2 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearate	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Tween 80	4%	$4/100 \times 100 \text{ mL} = 4 \text{ g}$ $98,05/100 \times 4 \text{ g} = 3,922 \text{ g}$
Span 60	4%	$4/100 \times 100 \text{ mL} = 4 \text{ g}$ $1,5/100 \times 4 \text{ g} = 0,06 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alcohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 31 = 69 \text{ mL}$

Tabel 11. Perhitungan Bahan Formula 3 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearate	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Tween 80	5%	$5/100 \times 100 \text{ mL} = 5 \text{ g}$ $98,05/100 \times 5 \text{ g} = 4,902 \text{ g}$
Span 60	5%	$5/100 \times 100 \text{ mL} = 5 \text{ g}$ $1,5/100 \times 5 \text{ g} = 0,075 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$

Setil alcohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 33 = 67 \text{ mL}$

Lampiran 6. Perhitungan Bahan Formula Anionik detergen 1, 2 dan 3

Tabel 12. Perhitungan Bahan Formula 1 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearat	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Natrium lauryl sulfat	0,25%	$0,25/100 \times 100 \text{ mL} = 0,25 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alkohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 25,25 = 74,75 \text{ mL}$

Tabel 13. Perhitungan Bahan Formula 2 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearat	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Natrium lauryl sulfat	0,30%	$0,30/100 \times 100 \text{ mL} = 0,30 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alkohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 25,3 = 74,7 \text{ mL}$

Tabel 14. Perhitungan Bahan Formula 3 dalam 100 mL

Bahan		Perhitungan
Ekstrak kasumba turate	2,8%	$2,8/100 \times 100 \text{ mL} = 2,8 \text{ g}$
Asam stearat	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Natrium lauryl sulfat	0,25%	$0,35/100 \times 100 \text{ mL} = 0,35 \text{ g}$
Metil paraben	0,18%	$0,18/100 \times 100 \text{ mL} = 0,18 \text{ g}$
Propil paraben	0,02%	$0,02/100 \times 100 \text{ mL} = 0,02 \text{ g}$
Gliserin	10%	$10/100 \times 100 \text{ mL} = 10 \text{ g}$
Setil alkohol	2%	$2/100 \times 100 \text{ mL} = 2 \text{ g}$
Aquadest	Add 100	$100 \text{ mL} - 25,35 = 74,65 \text{ mL}$

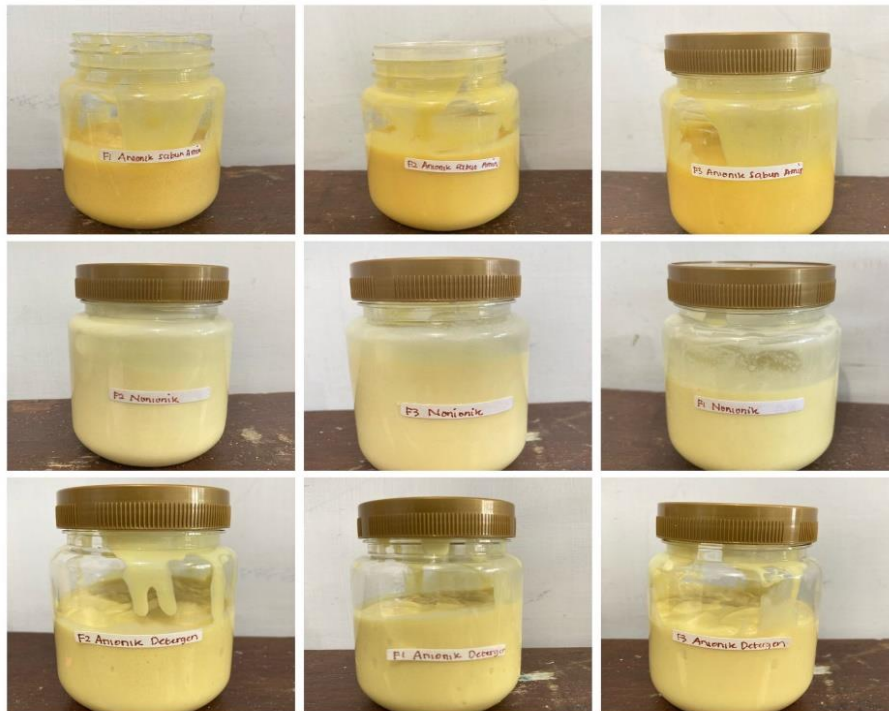
Lampiran 7. Rumus dan Perhitungan Rheologi

Rumus Viskositas (P) = Viskositas (cP) / 100

Kecepatan Geser = Kecepatan (RPM) / 60

Tekanan Geser = Viskositas (P) X Tekanan Geser Perhitungan
pH

Lampiran 8. Gambar Hasil Penelitian



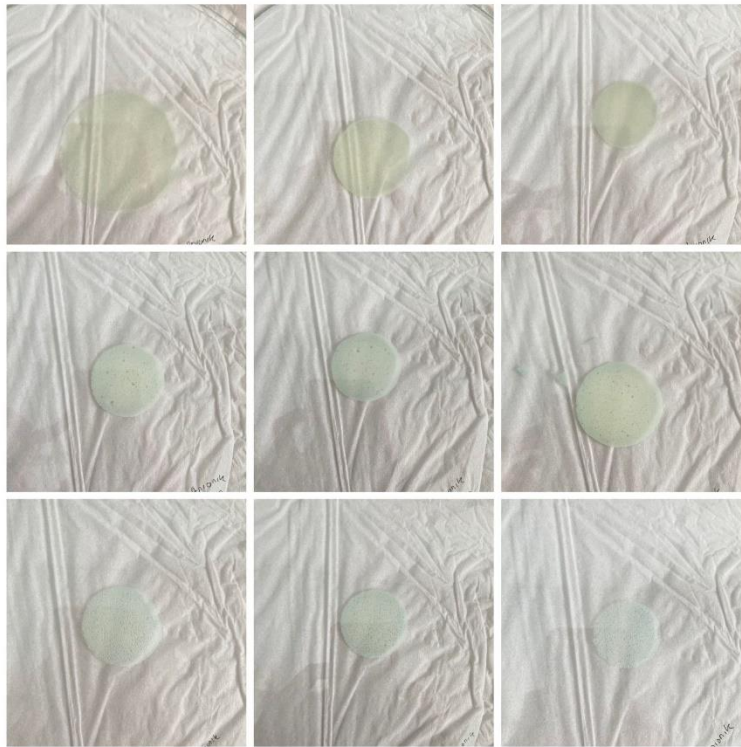
Gambar 7. Sediaan kondisioner sebelum kondisi dipaksakan



Gambar 8. Sediaan kondisioner setelah kondisi dipaksakan



Gambar 9. Uji visko sebelum dan sesudah kondisi dipaksakan



Gambar 10. Uji homogenitas sesudah dan sebelum kondisi dipaksakan



Gambar 11. Uji stabilitas sediaan kondisioner