

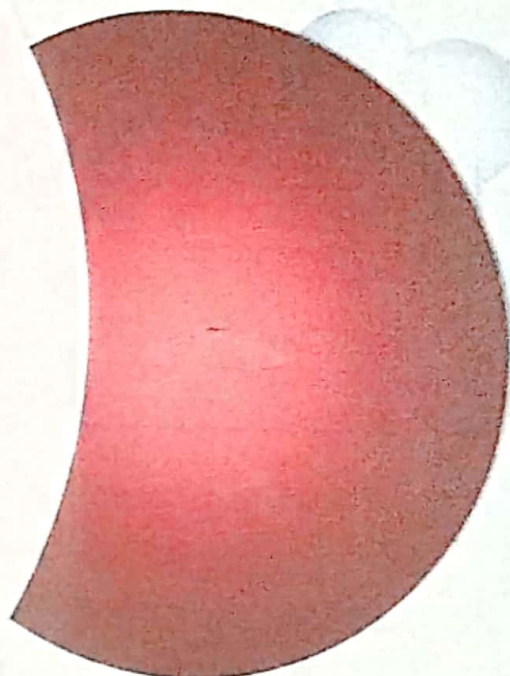
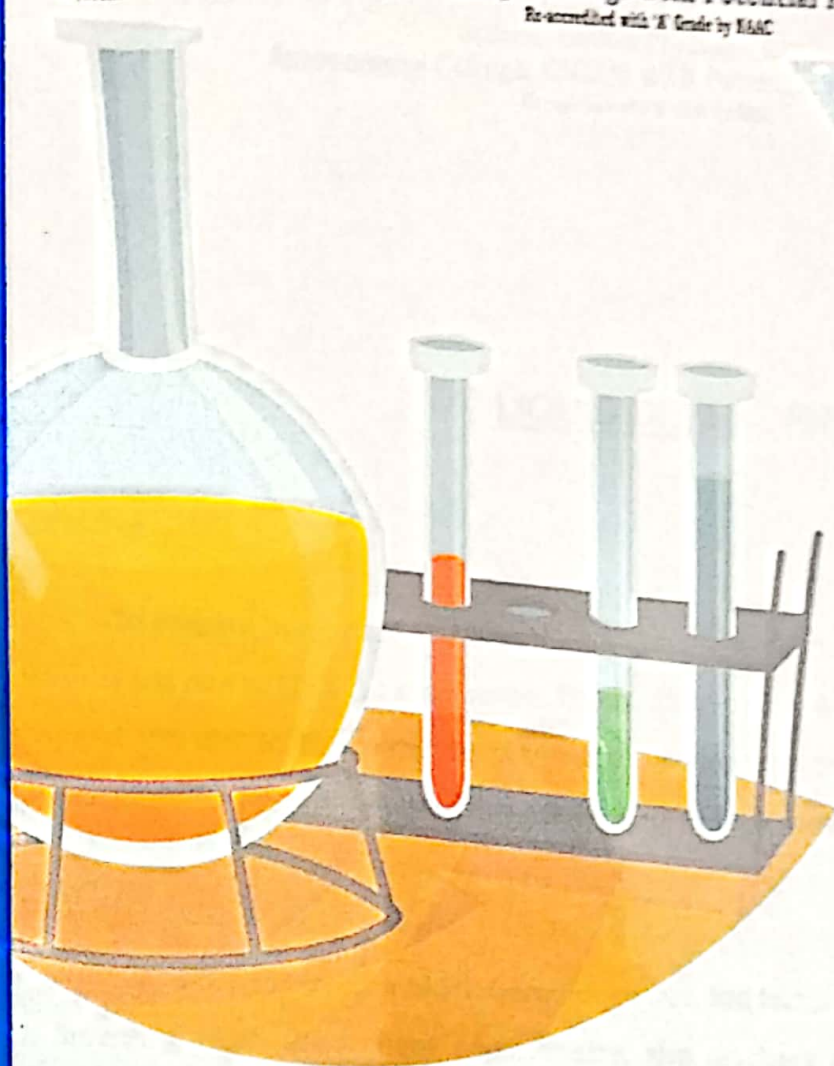


DODLA KOUSALYAMMA GOVERNMENT COLLEGE FOR WOMEN

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LIQUID DETERGENT

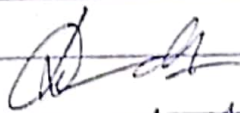
DEPARTMENT OF CHEMISTRY

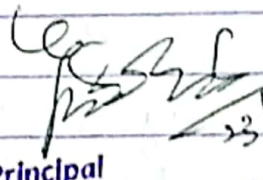
2021-22

Circular

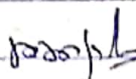
23/3/2022

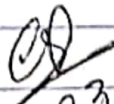
This is here by inform you that
 Department of Chemistry is going to
 organise a programme on the "preparation &
 action of High quality Liquid detergents for
 top load - front load washing machines"
 on 24/03/2022
 as part of best practices
 in the Dept of Chemistry at 11 A.M.
 So all the Science Students should avail
 this opportunity and make the programme
 highly successful.


 HOD, Dept of Chemistry

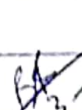

 Principal
 D.K.Govt. College for Women (A)
 NELLORE.

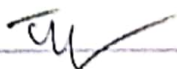


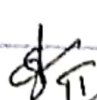


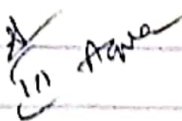

 23/3




 23-3-22



 BSC Biotech.


 11 Anna



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Date: 25.03.2022

LIQUID DETERGENT

Objective

To prepare liquid based detergent - a cleansing agent that differs from soap but can also emulsify oils and hold dirt in suspension. The function of liquid detergent is break up stains and suspend the dirt in the water to prevent the redeposit ion of the dirt onto the surface. Surfactants disperse dirt that normally does not dissolve in water.

Procedure

Under the supervision of Sri. Gurucharan Das, Rtd lecturer in Chemistry, DKW, Smt. D. Surendra, HOD, department of chemistry, the teachers as well as the students of the Department prepared the Anionic based liquid Detergent.

Ingredients

- 500 mL of sodium lauryl ether sulfate (SLES) as a base ingredient of liquid detergent
- 500 mL of alpha olephinic sulphonate (AOS) an additive in making soap lather
- 150 mL, of Sodium Silicate (SS), serves as a cleansing power of the detergent
- 5%-1% or 5-10 grams table salt or Sodium Hydroxide to maintain basic PH

- 500 mL of demineralised water
 - 2-5 mL of fragrance
 - 5-10 gms of urea to increase viscosity
1. Mix sodium lauryl ether sulfate and alpha olefinic Sulphonate in 1:1 ratio (each 500mL) and stir well with stirrer.
 2. Add 150 mL of Sodium Silicate to the above mixture and stir well.
 3. Continue mixing until it become sticky. Add small amount of water while mixing to avoid creating bubbles. Set aside the SLES-AOS-SS mixture when it turned cream.
 4. Get your cream and mixed it again slowly using the electric mixer.
 5. In a separate mixing bowl, dissolve 2 tablespoonful of salt or urea or lye in water before adding it to mixture SLES-AOS-SS.
 6. Add 2-5mL of blue to the mixture.
 7. Continue mixing using the electric mixer until it become creamy.
 8. Put it in a container and add few drops of fragrance and mix it well and set aside.
 9. From time to time, scoop bubbles forming at the top of the mixture and finally add 500mL-1000mL of demineralised water with stirring.
 10. When there is no bubbles anymore, put the liquid detergent in a clean bottle. You can use the liquid detergent after 24 hours

Summary

The students have prepared the anionic liquid detergent with the help of Sri. Gurucharan Das and faculty members of chemistry department. The detergent sample bottles were distributed among the college community.

The College Principal Dr. D. Giri, has rendered full support for the successful execution of this extension activity.



Feedback form

List of Students Attended

S.No.	Name	Class	Signature	Feedback
1	K. Poojitna	II nd BSC(BZC)	K. Poojitna	Good
2	V. Suresha	III rd BSC(BZC)	V. Suresha	Good
3	K. mahima	III rd BSC(BZC)	K. mahima	Good
4	K. Rajeswari	III rd BSC(BZC)	K. Rajeswari	Good
5	U. Sravani	III rd BSC(HF)	U. Sravani	Very well
6	Y. Sindhuja	III rd BSC(MP)	Y. Sindhuja	very well
7	P. Sravanthi	III rd BSC(MP)	P. Sravanthi	very well
8	Gr. Bhavana	III rd BSC(MP)	Gr. Bhavana	Good
9	Ms. P. S. Eshwari	III rd BSC(MP)	Ms. P. S. Eshwari	Very Good.
10	L. Sivanya	III rd BSC(MP)	L. Sivanya	Very Good
11	M. vijaya lakshmi	III rd BSC(BZC)	M. vijaya lakshmi	Good
12	K. Venkata lakshmi	III rd BSC(MP)	K. Venkata lakshmi	Very good.
13	K. Sandhya Rani	III rd BSC(MP)	K. Sandhya Rani	Excellent.
14	T. Archana	III rd BSC(MP)	T. Archana	Good.
15	P. Sireesha	III rd BSC(MP)	P. Sireesha	very Good.
16	D. Rajya	III rd BZC(E.M)	D. Rajya	Good.
17	D. Sireesha	III rd BZC(E.M)	D. Sireesha	Good
18	P. Bhadrithi	III rd BZC(E.M)	P. Bhadrithi	Good
19	CH. Jeevitha	III rd BZC(E.M)	CH. Jeevitha	Good.
20	P. Srijja	III rd BZC(E.M)	P. Srijja	Good

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He. Dept. of Research

Preparation of Liquid detergent

83

20/3/22

All the Staff members of Chemistry department have assembled ^{on 20/03/2022} in the Department room and discussed the following agenda:

Agenda :- To organize a programme on "The preparation and action of High Quality Liquid detergent for top load-front load washing machines" ^{by Dr. V. Gurucharan Das} as part of best practice in the Department of Chemistry on 23/03/2022 at 11:00 AM.

Discussion :- Teaching Staff & Non Teaching Staff of the Department thoroughly discussed and eventually decided to organize a programme on the "Preparation and action of High Quality Liquid detergent for top load-front load washing machines" ^{by Dr. V. Gurucharan Das} as part of the best practice in the Department of Chemistry on 24/03/2022 at 11 AM. Our Staff members strongly believe that this programme will inspire the students and to develop the entrepreneurial skills in them.

Resolution ① It is resolved to organize

a programme on "The preparation and action of High Quality Liquid detergent for top load-front load washing machines"

by Dr. V. Gurucharan Das in the Department of Chemistry ^{by Dr. V. Gurucharan Das} on 23/03/2022 at 11:00 AM.

1. ~~1~~ 20/3/20
2. ~~2~~
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