

# Department of Chemistry

## School of Basic Sciences

CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY,  
KANPUR

### Vocational Course for UG Programmes

Paper Name - Chemistry in Daily Life: Soap, Detergents and Household  
Chemicals

Paper Code – **VOC149**

#### Course Objective –

1. Students learn about the world of soaps, detergents, and household chemicals.
2. Impart the theoretical and practical knowledge of basic principles of preparing soaps
3. Impart the theoretical and practical knowledge of basic principles of preparing detergents
4. Impart the theoretical and practical knowledge of basic principles of preparing household chemicals

Course Content: **75 Hours** (Theory (15 hours) + Practical (60 hours))

Unit	Topics	Hours
<b>Theoretical Aspects</b>		
1	<b>Soaps and detergents:</b> Chemistry of soap and detergents, Raw material for soap and detergents industry and their selection, Chemical reactions of soaps and detergents, Washing action of soaps and detergents, Hard and Soft soaps and detergents, Liquid hand wash and liquid dish wash.	7+8 =15 a hrs
2	<b>Household chemicals:</b> Introduction and history of household Industry, Basic Theory of Household Chemicals, and Raw material required for household product, Product manufacture in household industry. Role of household product in day-to-day life	

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Practical Aspects		
3	t detergents preparation, Liquid hand wash and liquid dish wash preparation.	1 60 hr
4	<b>Preparation of household chemicals:</b> Synthesis and application of natural cleaning agents, cleaning action, floor cleaner preparation, Toilet cleaner preparation, Bathroom cleaner preparation, Kitchen Cleaner preparation	

**Total weightage of Theory** - 40% of marks, 15 hours (1 Credit)

**Total weightage of Practical** - 60% of marks, 30 hours + 30 hours (2 Credit)

### Learning Outcomes – By the end of this course participant will be able to

- 1 Learn about soap, define soap, hard and soft soap, liquid soap.
- 2 Learn fundamentals of household chemicals, define house hold products, various processes of house hold products
- 3 The students should explain preparations and reactions of household chemicals
4. The students should learn fundamentals of various cleaning agents and should define natural, floor, toilet , bathroom and kitchen cleaning agents

### Job Prospects-After completion of the course the individual will be able to

1. Get job opportunities in soap and detergent industries.
2. Establish small cottage industries

### Skill Partner- Indochem Dada Nagar Kanpur

### Suggested Reading –

- Small scale industries and house hold industries in developing economy by Shetty M.C.
- Manufacture of perfume cosmetics and detergents by Prasad Gia Raj .
- Industrial chemistry by B.K.Sharma.
- Flavours & Essential oils, Industries SBP Board.
- Perfumes soaps & cosmetics by Poucher.
- Manufacture of perfumes, cosmetics and detergents by Giriraj Prasad.
- Manufacture of perfumes, cosmetics and detergents by Prasad.
- Das, R. C.(1993). Education Technology: A Basic Text. New Delhi: Sterling.


  
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