



## Dishwashing Liquid: Which One Would You Choose?

Earlier, ash was used to clean household utensils before detergent based soaps were introduced. However, as time changed, people switched to new convenient options. Multipurpose cleaning bars which were detergent based were mainly used for cleaning utensils. But nowadays, dish wash liquids became popular as they are more convenient to use, give a good washing and also reduce surface damage. They make for better cleaning and had an aesthetic appeal. Many brands are available in the market today.

Choosing which brand of dishwashing liquid to buy is a tough task. Hence, we brought this comparative product testing report of seven different dishwashing liquid brands. The report below is your go-to guide in choosing the best for your home.

*A Consumer VOICE Report*

**D**ishes and utensils cleaning products are formulations in powder, bar, paste or liquid form. They contain a cleansing agent like synthetic detergent, soap, Sodium lauryl sulfate (SLS), etc. along with a powdered mildly abrasive material. These are used for cleansing of utensils, crockery and kitchen shelf and at times for wash basin, etc. where cleansing is effected by the combined action of detergency and scrubbing.

Keeping dishes and utensils clean is an important part of practicing good kitchen hygiene and food safety for everyone. It's important to make sure that the soap/liquid comes into contact with all surfaces of the dish to properly clean it. You can either create a sudsy solution or apply directly to the dish or sponge and scrub each one individually – ensuring you get all sides, and inside hard-to-reach items.

Two types of dish cleaners are mainly used for dishwashing.

1. **Dishwash Bars:** Bars are used for cleaning utensils.
2. **Dishwash Liquids:** Liquid utensil washers are liquid based soaps which are more convenient to use as well as gives a good washing and also reduces surface damage. Liquid soaps are more expensive and cause less wastage in comparison to bars as they do not mush.



brands of dishwash liquid /gel available in the retail markets. All the brands were tested in a NABL accredited laboratory. The test protocol followed was IS:6047-2009 reaffirmed in 2016. The test results were evaluated and graded as per their performance based on the comprehensive lab test reports.

### How we test?

The purpose of study was to evaluate popular

### Brands Tested

Based on availability, the seven most selling brands of dish wash liquid/gel were purchased from retail markets for comparative testing whose details are given below.

Rank	Overall Score (Out of 100)	Brand Name	Variant	Claim	Net volume, ml	Retail Price. Rs.	Price / 100g, Rs.	Best Before, Months	Manufacturer/ marketer
1	98	Dettol	Dish & Slab Gel	Disinfectant Kills 99.9% germs	200	72	36	24	Reckitt Benckiser India Pvt Ltd.
2	96	NIP	Active dish-wash Gel	100% vegetarian	250	45	18	Not marked	Fena Pvt Ltd.
3	93	Scrubz	Extra Strong	Concentrated (Refill pack)	500 + 500	125 (Buy 1 get 1 free)	25	Not marked	Reliance Retail Ltd.
4	93	Vim	With Power of Lemon	Concentrated Gel	500	115	23	Not marked	Hindustan Unilever Ltd.
5	93	Giffy	Lemon & Active salt	Concentrated dishwash GEL	500 + 500	150(Buy 1 get 1 free)	30	24	Wipro Enterprise Pvt Ltd.
6	91	Pril	Lime Grease fighter	Concentrate	750	190	25.33	24	Jyothy Laboratories Ltd.
7	89	Patanjali	Super Dish-wash Gel	With Rakh & Lemon	250	45	18	36	Patanjali Ayurved Ltd.

Rating: >91 – Very good \*\*\*\*\*, 71-90- Good \*\*\*\*, 51-70 Average \*\*\*, 31-50- Poor \*\*, up to 30 – Very Poor \*

### CV recommendations

**Top Performer**

**Dettol**

**Value for Money**

**Nip**

### Key Findings

- ❖ In overall performance, brand Dettol performed the best and was ranked No 1. It was followed by NIP and SCRUBZ.
- ❖ NIP is value for money brand, priced 45 for 250 ml.
- ❖ NIP had the highest amount of active matter followed by Dettol and Giffy.
- ❖ Dettol cleaned the maximum number of plates followed by Scrubz/Giffy.
- ❖ Dettol generated the highest amount of foam height (lather).
- ❖ In tough soil cleaning, NIP performed highest followed by Scrubz and VIM.
- ❖ There was no adverse effect on skin.



### Comparative Performance Score

Test Parameters	Brand	% Weightage	Dettol	Nip	Vim	Scrubz	Giffy	Pril	Patanjali
Packing		2	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Net Weight		2	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Marking/Labelling		3	3.0	2.6	2.6	2.2	2.6	2.6	2.6
Active Matter		20	19.13	20.00	17.22	16.40	18.40	17.86	15.86
Active alkalinity		5	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lather		10	10.0	9.25	9.5	9.0	9.00	9.25	8.50
Cleaning Efficacy		25	25.00	22.50	22.50	23.75	23.75	22.50	21.25
Tough soil Cleaning		18	16.72	18.00	16.87	17.55	14.96	15.25	16.34
Surface Damage		8	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Sensory Tests( Fragrance, Skin effect , colour)		7	7.0	7.0	7.0	7.0	7.0	7.0	7.0
<b>Total Score,% (Rounded off)</b>		<b>100</b>	<b>98</b>	<b>96</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>91</b>	<b>89</b>

# Buy one get one free



### Test Parameters and Results

#### Cleaning Efficacy

Cleaning efficacy involves the cleaning of soiled plates with dishwash test product through direct application. A fixed quantity of liquid (5 gm) was taken for each brand to check the cleaning efficacy. This test was done to evaluate the grease/oil removal efficiency of the product. Continue cleaning of plates one by one till 5 g of test sample is exhausted. Minimum number of plates cleaned per 5 gm of sample shall be 4.

All the brands cleaned more than the minimum number of plates. Dettol cleaned the maximum number of plates followed by Scrubz/Giffy.

#### Active Matter

Active matter is the main key ingredient as amount of cleansing agent/compound present in the cleaning liquid in the form of detergent or soap for the cleaning purpose. Active matter shall

be 12.0 % minimum. All the brands were found above the minimum requirement of 12%. Brand NIP had highest amount of active matter followed by Dettol and Giffy.

#### Tough Soil Cleaning

To evaluate the tough soil cleaning efficiency test, a soiling mixture consisting of wheat flour (16.5%), gram flour (16.5%), rice flour (17%) and 50 percent vegetable oil was prepared and spread evenly on the stainless steel plate using a brush. Soiled plates were put on hot plate maintained at temp of 325°C for about 2 minutes and was then cooled at room temp. Then, using the under test product, the plates were cleaned thoroughly. It had to be a minimum of 5%.

All the brands were able to clean the tough soil adequately thus meeting the IS requirement. NIP performed the highest followed by Scrubz, VIM and Dettol.



### **Lather**

Foam/lather generated is the amount of foam generated after dissolving a fixed quantity of dishwash liquid in a specified quantity of water. This test indicates the foaming efficiency of the product. Lather shall be 70 ml minimum. All the brands passed in this test. Dettol generated the highest amount of foam with a 10 out of 10 score followed by VIM.

### **Surface Damage (Scratches)**

The stainless steel plates were soiled by applying 2 gm of oil and then cleaned using the under test products. The nylon scrubber is wetted and rubbed 200, times using normal effort (100 clockwise and 100 anticlockwise). Scratches on plates were examined by visual inspection. As per the national standard, maximum of 1 scratch is acceptable. All the brands passed in this test.

### **Sensory/Effect on Skin**

Sensory tests were conducted in lab for parameters i.e. fragrance, colour and effect on skin. All the brands had lemon / lime fragrance. Colour of the dishwash was green or yellow. No adverse effect was observed on skin of any brand tested. Thus all brands are safe for use.

### **Active (reserve) Alkalinity**

The maximum limit for active alkalinity as per Indian standard is 20 ml. All the brands met the maximum permissible limit thus safe to human skin.

### **Marking**

The packages shall be marked with the following information:

- i. Name of the material and type
- ii. Net weight/volume of the material in the package



of all the brands was found as per their claim. Dishwash liquid/gel/liquid form. Therefore, before use, it should be diluted as per the instructions given on the pack.

### Overall performance

Based on the overall performance of seven brands of dishwash liquids tested in the laboratory, some of the brands have performed slightly higher than the others possibly

- iii. Name of the manufacturer and trade-mark, if any
- iv. Batch number
- v. Date of manufacture (month and year)
- vi. Directions and instructions for usages
- vii. Precautions
- viii. Best before
- ix. Key ingredients in descending order
- x. MRP
- xi. Customer care details

Best before was not marked by VIM, Scrubz and NIP. Key ingredients were not marked by Scrubz, Pril, Patanjali and Giffy. Brand Dettol had marked all information as per the requirements of Indian standard.

### Packing

The materials shall be securely packed in plastics, wrappers, paper board containers, cartons as appropriate to the product. Packaging should be recyclable or biodegradable. All the brands were packed in plastic bottles.

### Net Weight/Quantity

The net quantity for all the brands was measured and compared with the declared value. Net volume

due to higher quality of active ingredients used in their compositions. The performance tests were conducted using the recommended methods in relevant Indian standard. Performance of all the brands was found satisfactory. In overall performance, Brand Dettol was the highest scorer followed by NIP.

### Benefits of Using a Dishwasher

A dishwasher can help save you time, water and energy. It is more water and energy-efficient than washing dishes by hand — since a running sink uses more water, and the dishwasher uses less water in an entire cycle. Dishwashers are designed to clean at high temperatures, and yours might include a sanitization cycle. If you are busy or have a large household, a dishwasher will save you the time and effort of having to wash your dishes manually. Dishwashers can also clean more efficiently and are more hygienic. Water in dishwashers is heated to high temperatures to help kill any lingering bacteria, leaving your cutlery, dishes and glasses hygienically clean and ready to use again.