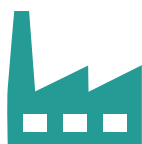
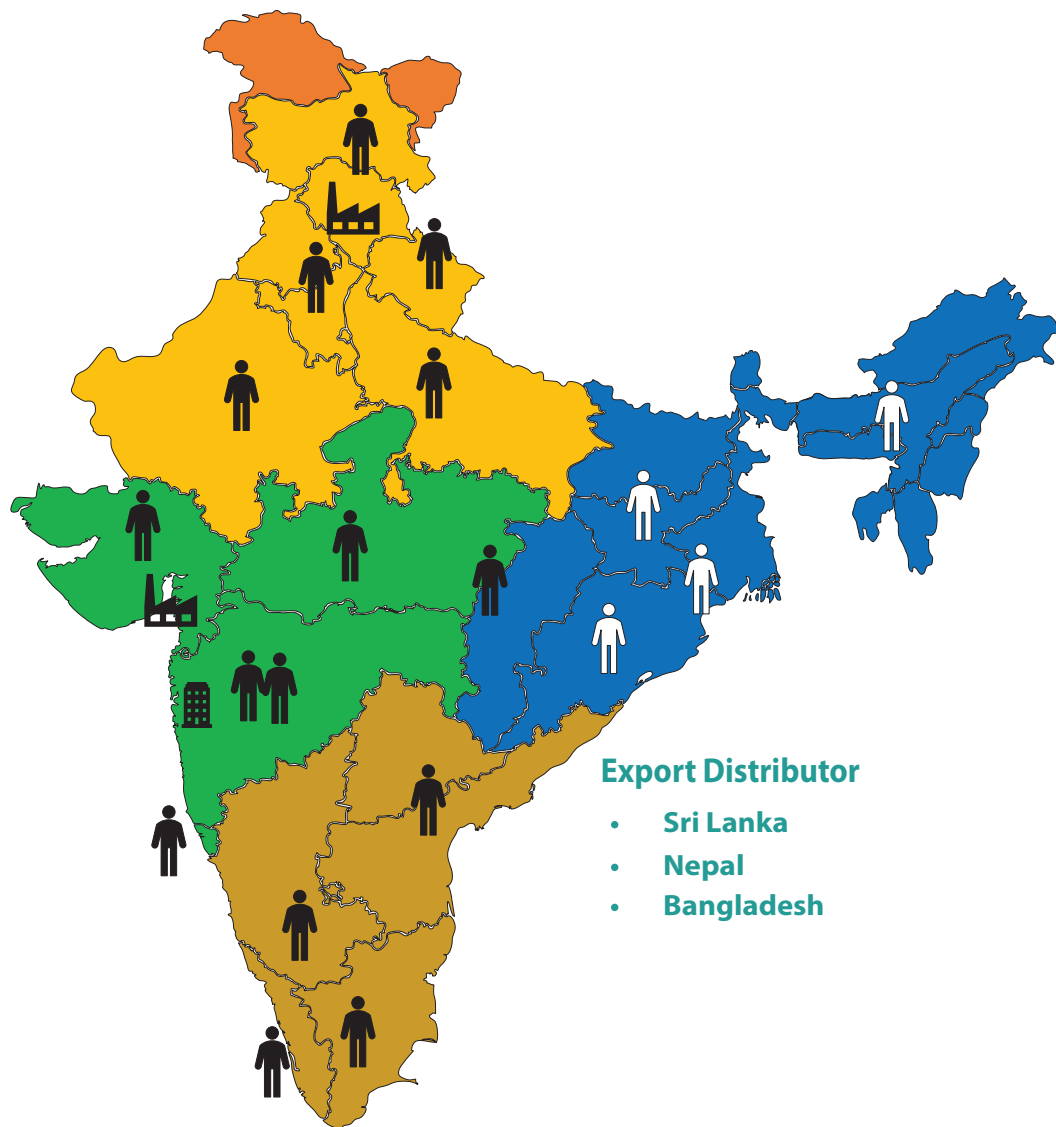


Solution for Laundry



Your Choice,
Our Commitment

Our Presence & Distribution



Our corporate office & plants situated at Ganesh Complex, Panchla,
Howrah - 711322, West Bengal, India



Having the strength of 25 employees to support Customers on time.



Company Profile

We introduce ourselves as the manufacturer of specialty chemicals who entered the market of Industrial cleaning in 2007. Offers scientifically proven cleaning solutions and disinfectants aimed at reducing harmful effect on environment. We are ISO 9001-2015 certified company, we also have the FDA approval for most of our chemicals with the green building certification for our Factory

“With immaculate performance imbedded in our products we dedicate ourselves to preserving cleanliness in an ecological way”



How Neerava works for You



From the spark of an idea, through to the delivery of a solution, is with you all the way

Neerava supports its customers in every phase of a project, from the inception of an idea or request, through design and testing to launch and installation. Our in-house research, design and development teams work closely with the local teams, drawing on customer and market inputs. Then using state of- the-art technologies to optimize costs and using our own specifically designed test benches to ensure rigorous, robust testing, we ensure a quality solution is delivered quickly to market.

No matter which processes and applications are planned NEERAVA has a solution in the cleaning and hygiene of kitchens and laundries and surfaces of all types in applications like Offices and Restaurants, Hospitals and Hotels, Retailers and Schools, Car Washes and Swimming Pools, Cooling Towers, Energy, Food & Beverage, Water & Gas Utilities Potable and Wastewater Treatment.

Partnership philosophy

Being a privately-owned business means that we are here for the long term and can plan projects with and for our Customers, where both parties benefit. It means we can rapidly take decisions to invest our resources to ensure our optimum solutions are delivered.

Your Business, Our Solutions

Our extensive product range represents a unique combination of design, development and implementation know how. With a wide and ever evolving range of products and ancillaries, we can offer specific and comprehensive solutions for a variety of industrial applications. Our solutions are conceived to fit seamlessly into your operation, optimizing the processes and applications.

Uniquely positioned

NEERAVA's 3 business units, Cleaning & Hygiene, Water & Industry and Industrial Processes puts us in a unique position to be able to respond to the widest range of business needs, with a broad range that allows you the Customer to deal with just one company, simple.

The Laundry Market

The global commercial laundry market is forecast to continue to grow steadily in the next 5 years driven by increasing demand for laundry services as the population grows. The market is driven by strong growth in the Asian and Far East markets with rising investments in commercial laundry markets.

Steady economic growth and rising disposable incomes are expected to foster demand for laundry services in these regions, consequently driving demand for various types of laundry machinery. The commercial laundry machinery market comprises companies engaged in manufacturing professional or non-residential laundry equipment, such as washers, commercial dryers, presses, and dry-cleaning equipment. Washers or washing machines represent the primary segment of the commercial laundry market, accounting for about 49% share of the global commercial laundry machinery market and are expected to register steady growth in the years ahead owing to the introduction of high-end washing machines.

Advancement in technology has led to the addition of several advanced features, such as water saving technology, energy efficiency, time saving features, and digital operational capability.

Manufacturers are concentrating on offering products that not only offer effortless operational capability but also eliminate the need for repair work in the long-term. Over the last couple of years 'SMART' laundries have emerged as technology helps save time, detergent, and energy consumption per laundry cycle.

NEERAVA's range of products enables it to effectively compete across the full spectrum of laundry operations, from the smallest OPL through to large complex laundries in hospitality establishments, up to and including the most complex tunnel wash systems from the industrial laundry market.



Laundry Wash Process



The Wash Cycle

1



Flush

In this process, the washing machine fills to a high level of water into which the soiled linen are added to reduce the soil load for the upcoming suds flushes.

2



Break

In this stage, high alkaline product is added, to loosen soil and may be followed by additional flushes. The break cycle is usually carried out at a medium temperature and low water levels.

3



This is the actual wash cycle in which detergent is added.

It takes place in hot water at low water level.

5

In this stage, bleach is automatically added in hot water at a low water level. Bleach kills bacteria, whitens fabrics and removes stains.

4



6



Rinse

High level of water introduced to remove detergent and soils from the linen.

7



Intermediate Extraction

This high speed spin removes left over detergent and soil from the linen, usually after the first rinse step. It removes 70% of water from the linen. The washing machine spins at 200 RPM.

9



Final Extraction

A high speed spin removes most of the moisture from the linen. The length of the spin depends on the fabric type, extractor capacity, and extractor speed. Around 95% of water is removed in this stage.

8



Softener/Sizing

Softener and sour are added to condition fabric. This cycle is run at a medium temperature and at low water level. Starches are added to stiffen cotton fabrics. Sizing may also replace the sour/softener step.



The smart connected washing machine market was valued at over \$1.55 Billion in 2015. The growing preference for convenience and the rapidly changing consumer lifestyle is contributing to the segment growth while the need for managing and controlling machines through smartphones and remotely in more complex professional environments is gaining traction across all sectors.*

*Source Global Industry Analysts



Laundry Applications



OPL Machines



Most OPL's are typically very small in terms of available space. Not only do they contain the washers, but also dryers, varying assortments of flatwork ironers, folders, steam cabinets, and so on, for processing laundry. The typical laundry utilizes a washer technology called washer extractors.

This type of machine ranges in size from about 7kg up to 60kg in the largest laundries. The name washer-extractor is used because after each portion of the wash cycle (soak, suds, prewash, wash, rinse or finish) an extraction imparting centrifugal force removes the liquid contents from the wash wheel to the drain. Some may be simply timed machines, other maybe semi or fully programmable.



Commercial Machines

Small to medium size laundries mostly rely on equipment referred to as washer-extractors. These look and operate somewhat similar to a residential front-loading clothes washer, except washer-extractors are 3 to 30 times larger. The largest models are huge; allowing workers to easily stand up inside the wash drum for service and maintenance.

The fabrics are washed in batches, like a residential washer.

Washer-extractor efficiency is usually measured in liters per kg of fabric. The typical washer extractors require 11 - 15 liters of water per kg of fabric cleaned. The most efficient machines have built-in water recycling capabilities; storing the rinse water from the previous load to supply wash water in the subsequent load, using less than 9 liters per kg of fabric.

For washer-extractors without built in recycling features, there are auxiliary recycling systems available that can be attached to washer-extractors to filter and sanitize the rinse water to be reused in the wash water supply. These systems vary in quality, size and efficiency. Recycling the water requires adjustment in chemicals and detergents used in the wash and rinse water to maintain the quality of the washing process.



Laundry Applications



Industrial Machines

Unlike OPLs, industrial laundries contract with, receive and launder stock from a wide variety of customers. Industrial laundries include uniform companies and those companies that launder materials from industrial firms, schools, and other institutions.

Although some of the largest laundries can process tens of millions of kilos of laundry each year, these operations are usually more process-related and are tailored to specific operations, unlike commercial laundries. Tunnel washers (sometimes called "continuous batch washers") are very different than washer extractors; long chambers 2.4m x 2.4m x 9.1m and larger are constructed with a series of compartments, called "pockets", through which a large internal auger (similar in shape of a large corkscrew) slowly turns to pull the laundry through the different pockets. The first few pockets mix detergent and chemicals (bleach, sanitizers, degreasers, etc) in the water and fabric to soak and wash. Augers move the fabric to subsequent pockets, dedicated to rinse functions. Water moves in a counter flow direction to the laundry and is therefore used several times before being sent to the drain.

At the end of the tunnel the washed fabric is removed automatically in the form of a large cake, mechanically compressed before being fed into the line of dryers. Water consumption rates typically found in these washers are approximately 7.5l per kilo of wash, or about two-thirds that of the typical washer-extractors.



Surface Cleaning

Surface cleaning can be carried out as a wet or dry process depending on factors including: the potential soils present, the product, the process and the type of equipment. As with manual cleaning, the accurate dilution of any cleaning agent or disinfectant is crucial to effective cleaning. To achieve the required hygiene result it is vital that the surface to be disinfected is free of soils or chemical residues as when these are present, it could prevent the disinfectant working as it should. Neerava spray and foam systems, as well as our dilution and dosing systems, help ensure the most effective cleaning process.



Laundry Chemicals



NEERAVA FB LOB

Liquid Oxy Bleach

Laundry Booster



NEERAVA FB LOB is high quality peroxide-based bleach for maintaining and enhancing whiteness and for removing stains coming from food stuffs and beverages.

- It is suitable for wide array of colored fabric too.
- This formulation has good storage stability.

USAGE INSTRUCTION

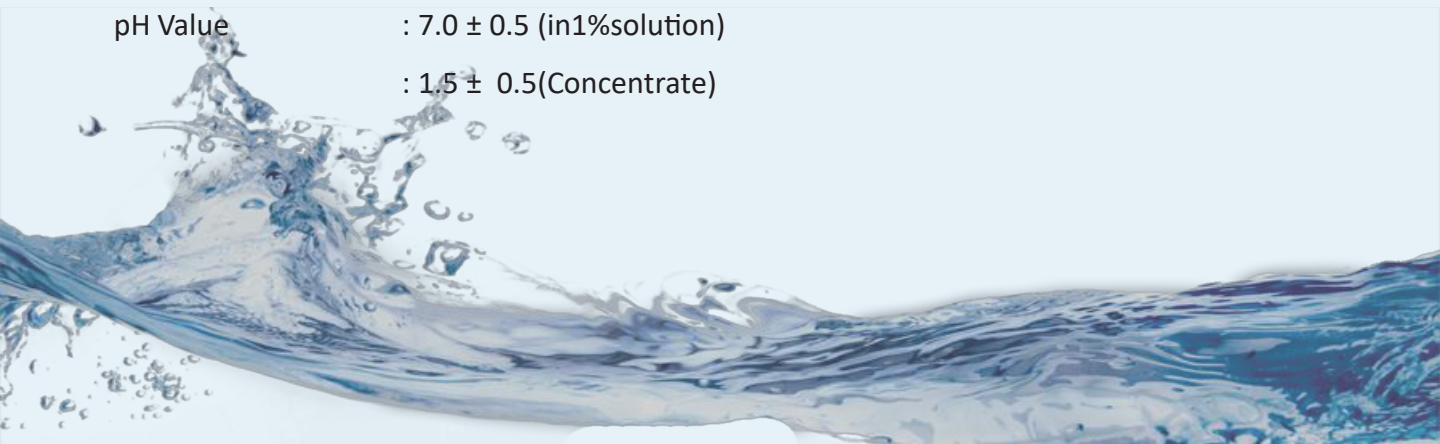
- 3-10 ml per kg of wash load depending upon intensity of stains.
- Wear protective gloves/ protective clothing/ eye protection/ face protection.
- Do not breathe mist, vapors or spray.
- Keep/Store away from clothing/ combustible materials

BENEFITS

- Safe on coloured linen.
- Can be used simultaneously in the main wash
- with detergent and booster.
- Economical dosage control.
- Long drum life for concentrated formulation.

SPECIFICATION

Appearance	: Clear Liquid – Colourless
Odour	: Characteristic Odour
Specific Gravity	: 1.15 ± 0.05 g/cm ³
Solubility	: 100% water soluble
pH Value	: 7.0 ± 0.5 (in1%solution)
	: 1.5 ± 0.5 (Concentrate)



NEERAFA FB HCB

HYPO Chlorine Bleach



NEERAFA FB HCB is a sodium hypochlorite based bleach suitable for use in all types of industrial laundry machines. NEERAFA FB HCB effectively removes staining on only WHITE clothes.

- NEERAFA FB HCB is designed for use through the Chemicals automatic dispensing equipment and should never be manually dosed.

BENEFITS

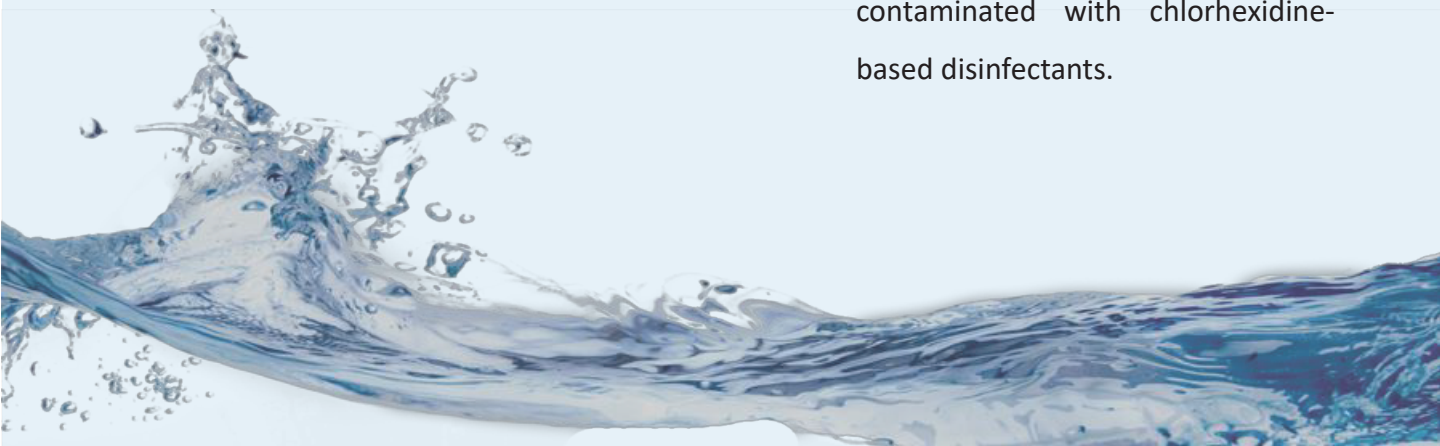
- Effective in all water conditions.
- Longer shelf life and stability
- Restricts corrosion risk.
- Economical dosage control, long drum life
- Easy identification—assists staff training

USAGE INSTRUCTION

SPECIFICATION:

Appearance : Clear Liquid
Specific Grav : $1.09 \pm 0.05 \text{ g/cm}^3$
pH Value : 11.71 ± 0.02
(in 1% solution) : 12.31 ± 0.02 (Concentrate)

- Dosage: 3–15 ml per kilogram wash load depending on light to heavy stains. Maximum temperature 60°C . Dosage may vary according to degree of soiling.
- Caution: DO NOT use on colours or on hospital linen that has been contaminated with chlorhexidine-based disinfectants.



NEERAVA FB SR

Pre Wash Laundry Stain Remover



NEERAVA FB SR effectively removes staining in coloured garments and is suitable for the removal of chlorhexidine stains.

NEERAVA FB SR is designed for use through Chemicals automatic dispensing equipment and should never be manually dosed.

USAGE INSTRUCTION

- For best results maintain alkalinity At pH11-12@75 to 85°C for 12 – 15 minutes.
- For light distaining, use from 3 mls/kg fabric weight 3–10m/kg of wash load depending on light to heavy stains.
- Dosage may vary according to degree of soiling.

BENEFITS

- Safe on coloured linen.
- Extended shelf life and stability.
- Will not allow chlorhexidine stains to set.
- Can be used simultaneously in the main wash with detergent and booster.
- Economical dosage control, long drum life.
- Easy identification assists staff training.

SPECIFICATION

Appearance	: Clear Liquid – Colourless
Odour	: Characteristic Odour
Specific Gravity	: 1.10 ± 0.05 g/cm ³
Solubility	: 100% water soluble
pH Value	: 4.19 (in1%solution)
	: 3.53 (Concentrate)



NEERAVA FB FS

Fabric Softener Concentrate

NEERAVA FB FS is a concentrated fabric softening liquid specially Formulated for use in commercial and on premise laundries. The product is suitable for application on most types of fabric and can be manually or auto dosed.



- NEERAVA FB FS conc. is a concentrated fabric conditioner Based on biodegradable cationic, quaternary ammonium salts. In the wash solution, these positively charged cationic, adsorb to the negatively charged surface of fabrics.
- Once adsorbed on to fabric the cationic have a lubricating effect.
- During the drying process, this prevents interlocking of individual fibers and build up of static electricity (especially on synthetic fibres).In addition lubrication facilitates ironing/ calendaring.
- The product has also been formulated with perfume, which leaves a pleasant smell on fabric.

SPECIFICATION:

Appearance	: Slightly white Liquid
Specific Gravity	: 1.02 g/cm ³
pH Value	:6.83 (in1%solution)
	: 5.79 (in100%solution)

USAGE INSTRUCTION

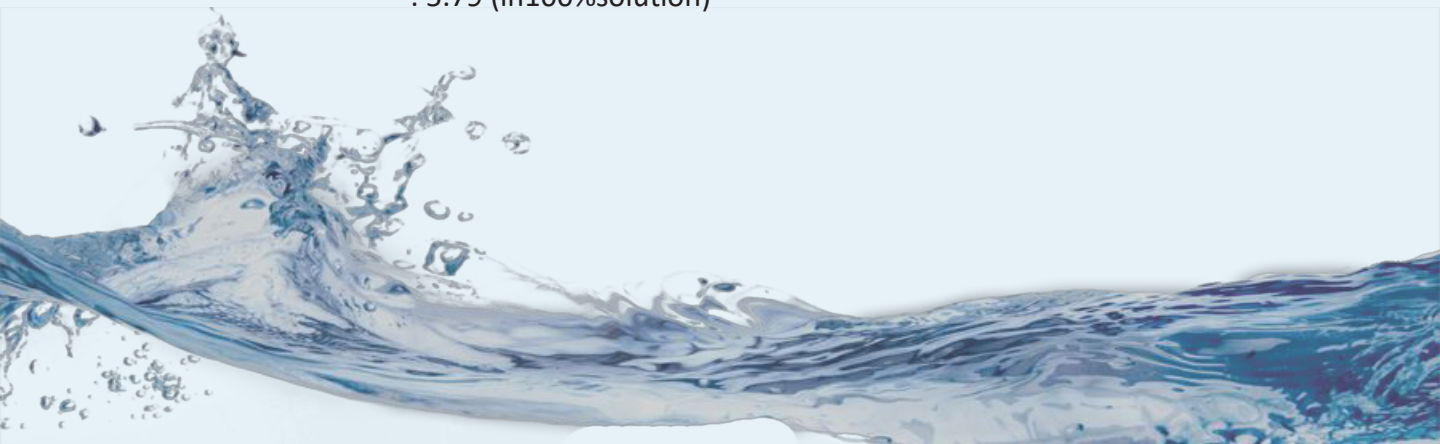
- Dosing level is dependent on wash classification. The softener Should be applied in the last rinse of a washer extractor or in the last section of a continuous batch washer.

BENEFITS:

- Good softening of many types of fabric (towels, sheets, wool, delicate articles. etc).
- Prevents build-up of static electricity on synthetic fabrics.
- Delivers a pleasant residual smell.
- Is based on biodegradable raw materials.

- **Dosage recommendation:**

1.5 - 5.0ml/kg of fabrics.



Your Choice, Our Commitment

