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## **Chemicals used in Housekeeping Department**

*S. Sajisha<sup>1</sup>, G. Karthikeyan<sup>2</sup>, A. Arun<sup>3</sup>*

<sup>1</sup>Student, M. Sc Hotel and Catering Management, Vels Institute of Science Technology And Advanced Studies.

<sup>2</sup>Student, M. Sc Hotel and Catering Management, Vels Institute of Science Technology And Advanced Studies.

<sup>3</sup>Assistant Professor, School of Hotel and catering management, vels Institute of Science Technology And Advanced Studies.

Email: [sajisha.shaji06@gmail.com](mailto:sajisha.shaji06@gmail.com)

[karthikeyangesan2699@gmail.com](mailto:karthikeyangesan2699@gmail.com)

[Arunarticle2016@gmail.com](mailto:Arunarticle2016@gmail.com)

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### **ABSTRACT:**

Chemical is a substance having defined composition and it is always made up of some stuffs. It is said as form of matter having constant chemical composition and characteristic properties. Humans combine chemicals for thousands of years. Artificial chemical compounds are useful to many industries. Chemical compounds are found everywhere in our daily lives.

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### **Introduction:**

Cleaning, which is a common part of our daily routine life. But does anyone knows that when did these cleaning products came into existence, well it dated back to the 19th century. From that time the industry has created thousands of different cleaning agents, products and habits. But due to the growth of advance science now a days we are using a lot of chemicals in the cleaning agents which leads to some infections of disease to humans and also spoil the environment as well. A housekeeper not only makes an area clean and sanitized but it's also the duty to make sure that whatever chemical or cleaning agent is used it doesn't harm anyone in any form. In this study will see what are the chemicals that are being used globally in the housekeeping department and for what purposes.

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### **What are cleaning agents/ chemicals<sup>1</sup>?**

Cleaning agents or chemicals are substances which are usually used to remove dirt, stains, and odours on the surface. They can usually be liquids, powders, sprays or even granules. Some of the chemicals only could kill bacteria and viruses which is very essential for maintaining a clean and good environment.

These can be further classified into;

**Cleaners:** usually a cleaner is compressed of water and some kind of detergent which is used for removing dirt by moping or scrubbing the surface.

**Disinfectants:** disinfectants would destroy or make the pathogens inactive for a certain period of time depending on the power of the pathogen or power of the chemical in it. They play a major role in creating a good environment.

**Sanitizers:** these are chemicals which reduces the growth of the bacteria's but they don't kill them totally. Some crucial areas like food manufacturing environment or food preparation centre requires these kind of cleaning once they are about to start their work.

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### **Cleaning agents and their uses<sup>2</sup>:**

TASKI R1

AREA OF USAGE:

Taski R1 is a bathroom cleaner cum sanitizer concentrate. It is used for cleaning and sanitising all bathroom surfaces, sink, tub, tiles, floors and fittings. It is safe for use on marble and granite.

DILUTIONS:

For cleaning: 20 ml in 1 litre water For sanitizing: 50 ml in 1 litre water

METHOD:

- Spray directly on the surface to be cleaned
- Leave for 2 seconds
- Scrub if necessary and wipe the surface with a clean and drycloth  Replace cloth regularly.

#### TASKI R2

##### AREA OF USAGE:

It is a hygienic hard surface cleaner concentrate. This is all purpose cleaning agents. Used for all hard surfaces and also on the shiny surfaces like polished marble, granite, etc.

##### DILUTIONS:

Normal soiling: 20 – 40 ml in 1 litre water

Heavy soiling: 50 ml in 1 litre water

##### METHOD:

- Floor cleaner for glass and floor like Italian marble, Can be used for wet mopping as well as scrubbing with a machine.
- Wet moping solution to be taken in bucket/mop trolley
- Rinse the mop frequently
- Alternatively use scrubbing machine and pickup direct solution using a wet vacuum cleaner.

#### TASKI R3

##### AREAOF USAGE:

R3 is a glass cleaner concentrate used for windows, mirrors, glass display cases.

##### DILUTION:

20 – 50 ml in 1 litre of water.

##### METHOD:

- Spray directly on a dry clean cloth.
- Apply to the surface and wipe with a clean dry lint free cloth.
- Replace cloth regularly.  Buffing dry.

#### TASKI R4

##### AREA OF USAGE:

Taski R4 is a furniture maintainer. It is used for polishing all wooden surfaces such as tables, chairs, etc. It can also be used to maintain polished metal surfaces like nameplates, brass handles etc.

##### DILUTION:

R4 is ready to use chemical, no need to dilute.

##### METHOD:

- Shake the bottle well before use.
- Spray on a soft dry cloth.
- Apply to the surface evenly and start buffing.
- Buffed the floor / surface to high shine.  Replace cloth regularly.

#### TASKI R5

##### AREA OF USAGE:

It is a room freshener or otherwise called as air freshener used for offices, corridors and washrooms. Deodorise guestroom, banquet halls and office room and also for the rooms where tobacco or other odours are very strong.

**DILUTION:**

Ready to use, No need to dilute

**METHOD:**

- Do not spray directly on the floor
- Spray upward into the centre of the room as required.

**TASKI R6****AREA OF USAGE:**

Taski R6 is the toilet bowl cleaner used for toilet bowls and urinals. Removes lime scale deposits and stubborn stain and leaves toilet bowls and urinals sparkling clean.

**DILUTION:**

Ready to use, No need to dilute

**METHOD:**

- Heavy duty toilet bowl and urinal cleaner.
- Do not use on stainless steel, enamel, marble and tiles.
- Flush around bowl especially around rim and bowl waterline.
- Direct nozzle under toilet rim and evenly over the surfaces.
- Leave for 5 – 10 min.
- Flush toilet.
- Push water level down with toilet brush.

**TASKI R7****AREA OF USAGE:**

It is used as floor cleaner concentrate. Used to remove oil and grease stains from the floors. Mostly used in kitchen. Used for both wet mopping as well as scrubbing with a machine on all kind of floors.

**DILUTION:**

Normal soiling: 20 – 40 ml in 1 litre water

Heavy soiling: 50 ml in 1 litre water

**METHOS:**

- For wet mopping, take solution, bucket and mop.
- Rinse the mop frequently.
- Alternatively use scrubbing machine and pickup solution with wet vacuum.

**TASKI R9****AREA OF USAGE:**

This is bathroom cleaner concentrate specifically used in hard water locations. Removal of hard stains from Bathroom Walls and Fittings. Regular usage prevents scale deposition on walls and fittings. Exercise caution while cleaning acid sensitive surfaces.

**DILUTION:**

50 – 100ml in 1 litre water, as per the stain requirement.

**METHOD:**

- Prevent scale dirt on wall fittings.

- Spray directly on the surface to be cleaner.
- Leave for 20 sec.
- Scrub and drain plain water.
- Wipe surface and polish all metal surfaces with clean cloth. ☐ Replace cloth regularly.

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**Role of chemicals:**

- Chemicals are the veins for housekeeping department in hotel industry as well as others.
- As it runs their days today operations in maintaining and sanitising public and private areas clean and free from disease spreading bacteria's and viruses.
- One standard chemical cannot be used in all the areas therefore agents like TASKI or diversey products are considered as a benchmark.
- Used to **remove dirt**, including dusts, stains, bad smells and clutter in solid surfaces.
- Purposes of using cleaning agents include health, beauty, elimination of offensive odor, and to avoid the spreading of dirt and contaminants to oneself and others.

**MSDS<sup>3</sup> MATERIAL SAFETY DATA SHEET:**

Material data handling sheet, provides information regarding chemicals and also educates about the emergency procedures and it mainly focuses on safeguarding the occupational health in the work place. It's also considered as an legal information which the company needs to educate it's workers. Without these information and working in these kind of place could be unsafe and they might not have an idea of what to do in an emergency situation.

A [Material Safety Data Sheet, often referred to as an MSDS](#), holds pertinent information about the physical properties of a hazardous substance. A material safety data sheet (or **MSDS**) is a document that provides workers with procedures for safely handling or working with a particular substance. This type of document is required by OSHA under the Hazard Communication Standard (HCS) in [29 CFR 1910.1200\(g\)](#). A material safety data sheet is a technical document which provides comprehensive information about a controlled product.

**Purpose of msds:**

These documents are required to be stored in any facility where the chemical is used. The purpose of MSDS is to **provide specific information related to the chemical** so that those who need to know about it can find it quickly and easily.

The main focus of an MSDS is to safeguard occupational health. It is mostly aimed at workplaces, and it's considered a duty and often a legal requirement to provide workers with such information. Without it, working in the environment could be unsafe and workers might have no idea what to do in an emergency situation.

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**The Elements of MSDS:**

[The following sixteen sections in an SDS/MSDS are:](#)

1. Identification
2. Hazard(s) Identification
3. Composition/Information on Ingredients
4. First-Aid Measures
5. Fire-Fighting Measures
6. Accidental Release Measures
7. Handling and Storage
8. Exposure Controls/Personal Protection
9. Physical and Chemical Properties
10. Stability and Reactivity
11. Toxicological Information
12. Ecological Information (non-mandatory)

13. Disposal Considerations (non-mandatory)
14. Transport Information (non-mandatory)
15. Regulatory Information (non-mandatory)
16. Other Information

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### Storage<sup>4</sup> and handling:

Before using any sort of chemical it's very advisable that to read the product label. Wear correct protective wear and use appropriate equipment's while you start the work. Also make sure that those who are not indulged in work are clear from the area of working. It's also advisable that while working with chemicals ensure the area is well ventilated so that in case of emergency you don't suffocate yourself. Following of safe work practices and standard procedures of the industry is highly recommended to avoid any physical damage to oneself.

Store in a cool, dry, well-ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation systems. Handling your cleaning chemicals safely and ensuring that standards are upheld is probably the most important aspect of proper cleaning chemical storage. All containers should be properly sealed and kept in either their original container or an appropriate container for their hazard class. Proper documentation, training, location, organization, handling, and maintenance of your cleaning chemical storage protocol will eliminate risks and ensure safety in your operations.

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### Labelling of chemicals:

Labels are defined as a group of written, printed or graphic informational elements concerning a hazardous chemical that are attached to the immediate container or the outer packaging. It is extremely important to have chemicals properly labelled. Symbols on the labels of cleaning agents indicate whether chemical ingredients are oxidizing or highly or extremely flammable, toxic, harmful, irritant, corrosive or dangerous for the environment.

Chemicals must be kept in **original, sealed, labelled containers**. If the label falls off, then the brand name and active constituent must be labelled on the container. Always keep a permanent marker around! Only decant chemical into identically labelled containers, that clearly show product name and active constituent.

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### Hazard communication:

As all of us know chemicals itself is hazardous but only few of us knew that their are some chemicals which are more hazardous than other of the same type. Chemicals such as disinfectants, detergents, concentrated soap solutions, may cause severe allergy or some other reactions without even getting in contact with the skin or body surface.

In order to control all these the OSHA (occupation safety and health administration) has ordered that each and every person must be aware of the chemical that they are going to use.

They have also made some set of rules like;

- Run a hazard communication program for every workmen in the department.
- Maintain a separate inventory list for the hazardous chemicals.
- Provide the workers with effective training and appropriate safety ware.
- Ensure labels and other warning signs are visible in the particular box or area. Etc.
- Also carefully maintain the MSDS record.
- Storage should be in appropriate container and temperature.

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### First aid measures:

If at all by mistake if any chemical comes in contact with the body or any sensitive part of the body follow these first aid measures then consult a higher authority immediately or seek medical attention in case of emergency.

**Eye:** the most common part that gets infected is the eye, so once if the chemical comes in contact with your eye do not run your eye as it could spread it inside. Instead hold on to the irritation and run to the nearest water point and wash the eye with running water with your eyelids open. Do it for at least 5-10 min then still if you feel some irritation do consult the doctor as eyes are very sensitive.

**Skin:** so common as mostly chemicals needs to be mixed when it's concentrated or to be used as it is for better cleaning. So at that time its quite common to come in contact with chemicals directly on the skin provided if your not wearing the correct protective wear. The first aid you could do hear is again water. Wash it with cold running water and if it is a concentrated chemical then you should be rushing to the doctor.

**Inhalation<sup>6</sup>:** this is not a common one but it's a deadly one which might cause death in some cases. It's always advisable to mix concentrated chemicals in a well ventilated area so that the fumes doesn't directly hit the person. It's always a standard procedure that you should always use a gas mask while mixing these sorts of concentrated chemicals. If at all inhaled and the person is not breathing first measure is giving the CPR.

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