

# ELECTRODRY GROUP

## Mattress Cleaning



# *Acknowledgement*

Electrodry Carpet Dry Cleaning acknowledges a major part of this work was contributed by Jena Dyco Intl, Melbourne, Australia.

We thank Jena Dyco for their continued support and invaluable assistance.

# *Disclaimer*

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# ***Introduction***

## **Why Clean your Mattress?**

There are a number of good reasons as to why you should clean your mattress. A few reasons include:

- The average person loses up to 1.5 cups of water per night (from perspiration)
- The average person loses two thirds of a kilogram of dead skin every year.
- The exfoliated dead skin provides an ideal food source for dust mites.
- The moist, dark, food laden environment in a mattresses provide the ideal breeding environment for dust mites, fungi, mould & bacteria.
- Dustmites excrete almost twice their body-weight each day. Their excrement contains a chemical called “guanine” which is toxic to human’s causing allergic skin reactions including eczema as well as causing and inflaming respiratory conditions such as asthma.

## **Healthy Mattress Cleaning – Summary**

- The Healthy Mattress System removes the dustmites, the dustmite excrement and the dustmite food source through thorough vacuuming with the Kirby vacuum.
- The Healthy Mattress Solution kills the germs, bacteria, mould fungi and dustmites in the mattress ensuring it is safe for the user.
- The Healthy Mattress Solution is active for 6 months after application to keep the dustmites away and restrict growth of bacteria, germs, mould and fungi.
- The Healthy Mattress Solution is infused with natural lavender oils. A fragrance proven to be calming and promote healthy sleeping patterns.
- The Healthy Mattress System removes is a dry cleaning system that still removes body oils and fats and reduces yellow staining in the mattress and pillows.

## **Deluxe Mattress Cleaning System – Summary**

- The Deluxe Mattress Cleaning System includes all of the benefits of the Healthy Mattress Cleaning System
- Deluxe Mattress Cleaning System removes contamination from urine and blood
- Deluxe Mattress Cleaning System also removes stains from contamination from other waste
- Deluxe Mattress Cleaning System treats contamination inside the padding of the mattress from urine and blood.

## **Good Business Practice**

Professional mattress cleaners are expected to provide the following:

### ***Quality service***

This incorporates a reliable, prompt and efficient service. The client should be advised as to all procedures. The attending technician or technicians should be punctual, polite, helpful, and understanding of the clients' needs in relation to their goods to be cleaned. They should also be correctly attired (wear clean, correct uniform, etc.).

### ***Quality equipment***

This means vehicles and equipment that must be readily available and in good working order at all times. All equipment should be properly labelled with the Company name, telephone numbers and address as well as any appropriate safety advice. All equipment and vehicles should be checked and maintained regularly, without waiting for breakages to occur. Mattress cleaning equipment is also used for carpet cleaning. It is imperative that the vacuum be cleaned and prepared for mattress cleaning in the van so that it appears "purpose-built".

Each vehicle should be presentable and properly signed written. It should be clearly defined who is responsible for the maintenance of equipment and vehicles to ensure their availability and readiness.

## ***Qualified staff***

This requires that all personnel involved in all of the procedures are properly trained and skilled in their areas of involvement. This could include the receptionist (telephonist), office staff, on-site technicians and factory/warehouse staff (at times some furniture cannot be cleaned on site). This could mean attending appropriate Training courses relevant to the job specification of each member of staff involved.

Communication skills are of the utmost importance for all personnel involved in the Service industry.

## ***Documentation***

Provision of professional documentation, which means the availability of all appropriate forms, starting with the initial telephone call checklist, pre-inspection forms, through to a final account.

## ***Chemicals, etc.***

Provision of chemicals and appropriate ancillary supplies must be constantly maintained and re-stocked. All chemicals should be clearly labelled and stored in appropriately ventilated areas. For all chemicals that are used and carried either at the factory/warehouse, in each vehicle or on site material safety data sheets (MSDS) must be available. Health and Safety

Ensuring safety is a prime responsibility of any professional. These incorporate provision of a healthy and safe environment for the technician as well as customers.

# **Chemical Safety**

## ***General Chemical Safety***

1. Store chemicals securely in correctly labelled appropriate containers.
2. Containers used on site should be correctly labelled
3. All safety data sheets (SDS) must be available wherever chemicals are being used or carried (vehicle, on site, factory)

4. Carry and use protective equipment such as chemical resistant gloves, respirators with appropriate filter cartridges and eye protection.
5. Dispose of waste and unused chemical properly in accordance with local regulations as per Australian and New Zealand standards
6. When mixing chemicals for cleaning upholstery always read the label of the container and mix chemicals according to the manufacturer's directions
7. Always read labels and observe safety considerations
8. Never mix chlorine bleach with ammonia as it creates ammonium gas, which is poisonous
9. Do not sniff chemicals or containers to find out what it is. If in doubt, throw it out
10. Wash your hands well after handling any chemicals or containers with chemicals
11. Avoid skin contacts with chemicals. Acids and alkalies can burn the skin
12. Hydrofluoric acid rust remover has an anaesthetic effect and is dangerous because it attacks skin rapidly and the damage will not be felt immediately. It should never be used without wearing rubber gloves
13. Continuous exposure to even the mildest of chemicals can lead to problems. Nearly all chemicals can have a threshold limit value (TLV). This rates the parts per million at which exposure may become a problem
14. Always cap your chemicals immediately following their use
15. Never leave any chemicals unattended
16. Ensure that children or pets do not have access to the area while chemicals are being used

## **Equipment Safety**

### ***Electrical Safety***

1. Have all electrical equipment regularly checked and serviced at least every 12 months (more often if equipment is used in a construction site. Inspect power cords for wear, fraying or other damage)
2. All electrical equipment that is not marked as being double insulated, should be properly earthed (grounded)
3. Use an earth leakage protection device and check all power points are earthed
4. Never disconnect safety features on equipment
5. Do not allow electrical cords or plugs to become wet
6. If you blow a fuse in a fuse box, replace it with the correct size fuse wire (15 Amps for power points are standard throughout Australia)
7. Disconnect power cords from sockets before doing any maintenance on your Equipment
8. Disconnect electricity before filling equipment with water

## **Site and Personal Safety**

1. Ask the customer if there are site risks that you need to be aware of such as trip hazards or faulty power points.
2. Undertake a risk inspection before commencing works. Complete the pre-inspection on the Electrodry Invoice
3. Arrange equipment so that it is out of traffic ways
4. Arrange hoses and power cords so that people cannot trip
5. Always ask people to keep children away from the work area at all times
6. When not using hoses, turn off pressure hoses to prevent accidental spraying of
7. Fluids and keep a tool connected to the vacuum hose to prevent accidental injury



8. Keep spotters under cover and under strict supervision at all times
9. Use drop sheet to help prevent slippery floors
10. Post caution signs to warn customers that floors may be slippery and give verbal warnings as well
11. Ask customers if any occupants suffer allergic reactions, and take appropriate actions or precautions. Certain chemicals (usually perfumed deodorants used in some chemicals, solvents, alkaline or acid solutions or enzymes) or even just raised humidity levels can trigger attacks in hypersensitive people. Sometimes the fine dust kicked up by pre-vacuuming or moving fabrics about can fill the air with Dust-mite soiling (a very well-known allergen)
12. Use correct lifting techniques to avoid back injury Pre-Inspection

The first and most important step in mattress cleaning is the pre-inspection and pre-testing. An informed opinion regarding the best method of cleaning, decontamination or stain removal to be used can only be achieved following the thorough inspection.

Always pre-test fabrics for colour (dye) stability even if you think you know the fabric and are confident that no problems exist.

## **What to Look For In the Pre-Inspection**

When we carry out our pre-inspection we are looking for things that could cause us problems before, during and after the cleaning procedures.

They are things such as:

1. Age and condition
2. Loose stitching
3. Soiling
4. Mould growth
5. Spots and stains
6. Type and extent of contamination

7. Existing colour bleeding or dye run
8. The possibility of colour run or bleeding
9. Browning or other colour gain
10. Residues or results of previous cleaning
11. Manufacturers little surprises (ink lines and such)
12. Glues or fillings that may change with age

## **Procedures for Pre-Inspection**

### **1. Ask Questions**

Ask the customer questions like the following:

- 1.1. The age and any previous cleaning history of the mattress.
- 1.2. What the spots and stains may be and how long they have been there.
- 1.3. If there are any particular concerns or problems that the customer knows of.
- 1.4. Is there any contamination in the mattress such as urine contamination

### **2. Visual Inspection**

Inspect each mattress and make note of any problems or pre-existing conditions.

- 2.1. Look for pre-existing conditions that may affect the appearance of the mattress:
  - 2.1.1. Stains, existing water marks, spots
  - 2.1.2. Contamination from urine, blood, faeces or other products
  - 2.1.3. Colour damage. Colour added (e.g. browning, cordial stains) and colour loss (e.g. bleaching and fading)

2.1.4. Note the type and amount of general soiling

2.1.5. Weak or torn seams, presence of holes or tears

2.2. Look for signs of physical damage to the fabric:

2.2.1. Frayed edges.

2.2.2. Tears, holes, burn marks or other signs of neglect or abuse.

2.2.3. Loose or broken stitching.

2.2.4. Chemicals from body oils can also damage fibres.

2.3. Identify and categorise type and extent of contamination:

2.3.1. If there is urine contamination, use a hydro-sensor to check the extent of the contamination. Only apply the hydro-sensor to the stitching or piping lines so that holes in the fabric made by the hydro-sensor are not obvious

2.3.2. If the urine contamination is repeated in the one area, and covers an area the size of a dinner plate or larger, then the urine contamination is likely to be too significant to effectively treat. In this case, the mattress should be replaced.

One of the best ways to find out about a particular spot or stain is to ask the customer. They will usually be able to give you a historical account of it. How long it has been there and what they may have done to it to try and remove it. This is important to you in order to have the best chance of removing it. Some stains can set with time and may be impossible to remove. Some treatments used by customers can set stains that would otherwise have been easier to remove.

2.4. Some things to remember about spot and stain removal.

2.4.1. Never promise to remove any spot or stain.

2.4.2. You have to remember that a certain chemical may be all right to use on a particular fabric, but the fillings may be affected.

2.4.3. Sometimes, no matter what you do, certain degradation or discolouration's can remain after cleaning.

## 2.5. Determine the possibility of, or nature of any colour damage:

Always test a fabric for colour stability even if you are confident that no problem exists. Bleeding occurs in a fabric after cleaning when colours migrate into an adjacent area of damp fabric.

2.5.1. Colour run or wet crocking – movement of dyes to other areas of the fabric in the presence of water. It can happen straight away, but often it happens in the very last stages of drying.

2.5.2. Colour loss and colour fade. Dyes are lost due to chemical reactions, atmospheric conditions or sunlight. Both colour loss and colour fading are permanent conditions. Fading frequently found on older drapery fabric is always permanent and can never be corrected with cleaning. Dye loss is often due to the chemical called benzoyl peroxide, found in acne medications.

2.5.3. Colour damage due to stains.

2.5.4. Crocking -colour transfer to another fabric in a dry state.

**Note:** When wet cleaning a mattress, a procedure that helps stabilise dyes to keep them from bleeding involves using an acid pre-spray and/or rinse and drying fabrics quickly.

## 2.6. Determine the presence or possibility of browning (brown or yellowish discolouration).

**Notes:** A technique that helps prevent browning in any cellulosic fabric as the result of wet cleaning is to control the amount of moisture applied, control the pH of the chemistry used (keep it slightly acidic) and dry the fabric very rapidly. Some browning can be removed with a 3% hydrogen peroxide solution. If a hydrogen peroxide solution that is stronger than 3% is used to correct staining or browning on cotton fabrics, then fibre damage may occur.

# Reviewing Your Pre-Inspection

Following the pre-inspection discuss all your findings including aspects of concern with the client. Always seek authority from the customer (preferably written) to proceed. It is far better to be cautious than to end up with a problem.

If your inspection and tests reveal no perceived problems then you can proceed cautiously but throughout the job keep a vigilant eye for potential problems. Improper inspection and /or communication with the customer are typically the major cause of complaints.

**Remember:** Before you attempt to clean it is their problem. Once you start to clean it can become your problem.

# Cleaning Chemicals

## **Introduction**

The cleaning of mattresses typically uses a smaller range of chemicals compared to that of carpet, upholstery or any of Electrodry's other services. Some of the cleaning chemicals that you may use in mattress cleaning are listed below.

## **Dry Solvents**

A dry solvent is a solvent that does not contain or mix with water and is primarily used to dissolve oil-based soils. A dry-solvent based solution is the safest and most effective solution for removing most body oils. Electrodry uses Dry-Solve-E which is a safe, non-volatile solvent.

## **Deodorants and Anti-Microbials**

### ***Deodorants and Antimicrobials***

Deodorants are a term used for a variety of chemicals used to improve the odour.

This can be achieved in a number of ways:

1. Strong perfume can be used to cover one odour with another.
2. Odour chemicals can be changed to prevent them from leaving the source.
3. Destroying micro-organisms that give off unpleasant odours
4. All three methods may be combined.

The Healthy Mattress Solution is designed to perform all 3 as it kills micro-organisms such as bacteria and mould that cause the odour; prevents existing odours from leaving the source and replaces existing odours with a lavender fragrance.

If treating contamination in the mattress from urine or blood then apply a virus ide such as Meditech into the padding of the mattress at a ratio of 5ml per 5 square centimetres. This is in addition to heavy topical application.

## **Spot And Stain Removal Chemicals**

A comprehensive stain removal kit should contain:

1. Non-volatile dry solvent (NVDS) for paints and gums (E-POG, E-Gum)
2. Volatile dry solvent (VDS), dry solvent is used for dissolving oil based soils (Dry-Solve E)
3. Water-linked solvent, for dissolving oil based stains into a solution that will mix readily with water and then further removed with hot water extraction (E1)
4. Neutral detergent for removing soiling spots (E8)
5. Coffee, Tannin, Urine Spotter (E-UST)
6. Alkaline detergent for removing more stubborn spots (E1 or Electro Prespray)
7. Enzyme digester to digest protein stains into more soluble compounds (Protein Spotter)
8. Acetic acid (or similar) for lowering the pH (E2)
9. Rust remover
10. Browning Treatment
11. Oxidising agents (Mattress and Pillow Stain remover)
12. Reducing agents or dye strippers (Red Stain remover)

### ***Spot and Stain Removal on Fabrics***

Spot and stain removal is an important aspect of cleaning. Customers do not always notice a slow build-up of general soiling but will immediately notice a new spot or spill on their furnishings. In order to select the appropriate treatment and to treat stains successfully they must be properly categorised.

**Spots** are areas that are lighter than the original colour of the fabric. Most spots are created by chemical spills or the application of a colour-removing chemical. Spots on fabrics can not be rectified, because they can cause permanent damage to the fibre. The customer should be advised accordingly.

**Stains** are areas where colour has been added to the fabric and these may be removable with care.

### **General points to remember:**

1. Not every stain will be removed completely. When attempting to remove stains the technician should know when to stop in order to avoid causing permanent damage to the fabric, which can be caused by over-use of cleaning agent or over agitation. If a spot does not respond to normal spotting techniques please stop and point it out to the customer and advise the customer that continued efforts may damage the fabric.
2. Fabrics can look patchy when wet. Certain absorbent fibres may appear translucent (the light can shine through) when wet. Pale cottons and similar fabrics are noted for this. Anything behind the fabric can be easily seen. This translucent appearance will be noticeable at the time of pre-testing.
3. Sometimes the shadow of a stain may be visible after the majority of it has been removed. This shadow may be the result of a second material underneath the surface material or a staining material on the reverse side of the original fabric, which could not be removed with agitation. These will often disappear when the fabric returns to its normal opaque state when it is dry.

## ***Identifying Spots and Stains***

The easiest way to identify spots and/or stains is to ask the customer. You may get other clues like:

1. Colour (brown could be coffee, tea, old blood etc.)
2. Shape. (a lump could be chocolate, or a splatter could be a beverage)
3. Smell. (urine has a distinctive smell. So does wine etc.)

4. Feel. (sticky could be sugary or a gum. Hard could be paint)

Identify the problem if possible and then treat accordingly.

Some stains are best treated before cleaning and others may only require treating only if they still remain after cleaning.

### ***Solvent Soluble Stains***

Mainly oils, grease and fatty soils.

#### ***Cleaning procedure:***

The correct procedure for removing a grease stain from fabric is to use volatile dry solvent (Dry-Solve E). Volatile dry solvent should be applied directly to grease stain, and then it should be blotted with a white cloth.

Alternatively you can apply a water linked solvent, then vacuum with the hot water extractor and rinse with water and extract again. We recommend just using Dry-Solve on mattresses where possible.

### ***Detergent Soluble Stains***

Mainly general soiling, sugary spills and food spills.

#### ***Cleaning procedure:***

Can be treated with normal cleaning procedure. Sometimes repeat applications of detergent are required to remove stubborn soiling.

### ***Enzyme Digestible Stains***

Enzymes are used to digest mainly protein soils, food spills and other biological contamination (sweat, urine, faeces). Other examples of protein stains are blood, milk and egg stains.

#### ***Cleaning procedure:***



Apply enzyme digesters and allow 20 minutes dwell time. Rinse extremely well. Remember: natural enzyme spotters are easily damaged by extreme acidity or alkalinity.

## ***Non Soluble Stains***

Mainly carbon soiling (graphite, pollution soiling)

Cleaning procedure:

A lubricative detergent and further agitation may be required to physically remove these.

## ***Colour Loss (Spot)***

Bleach marks

Fading

Not much can be done with this apart from explaining to the customer before you clean.

## ***Other Special Stains***

1. Chewing gum stains

### ***Cleaning procedure:***

Remove excess gum with the scraper, without damaging the fabric. Apply NVDS solvent, blot well and re-apply as needed. Follow with VDS. Alternatively apply a water-linked solvent, extract and rinse well with hot water extraction.

2. Ink / pen stains

Ink stains found on drapery can be any of the following: water soluble, dry solvent soluble or insoluble.

### ***Cleaning procedure:***

Advise the customer of the difficulty associated with this type of stain. Proceed only if permission is granted, preferably in writing. First, apply dry solvent with a cloth, agitate and then absorb with a clean dry cloth. If it does not respond to treatment then it is most likely not a dry solvent soluble stain. In this case, treat the stain with a water-linked solvent. Apply a water-linked solvent, then vacuum with the hot water extractor and rinse with water, and extract again. Assess the appearance of the stain. Discuss all results with the customer. If the ink stain has not responded to solvent treatments it may be a pigment or a dye type of stain.

### 3. Pigment dyes & food acid dye stains

Use the same procedure as for ink removal. Then with the customers permission reducing and oxidising agents can be used for these types of stains with extreme caution.

4. Cellulosic browning of the fabric can be due to oxidation of the lignin in cellulose, present in vegetable fibres. It can be caused by spills of water-based liquids or the result of incorrect cleaning chemicals or methods or by prolonged drying times.

#### ***Cleaning procedure:***

Apply Browning Treatment, allow a few minutes to work, rinse and apply an acetic acid solution, and then dry vacuum well. Assist drying with air movers.

5. Yellowing on mattresses and pillow. Caused by moisture in the fabric, usually a result of body sweat.

#### ***Cleaning procedure:***

Apply oxidising agent such as Mattress and Pillow Stain Remover. This product will take 4 to 8 hours to be totally effective. Do not wipe off after application. Works best under UV light for a period of up to 1 hour. Extended exposure to UV light can cause bleaching.

6. Rust stains are Iron oxide formed by oxidation or corrosion of the surface of iron or steel. Rust can transfer from the metal surfaces onto the fabric.

#### ***Cleaning procedure:***

Apply rust remover sparingly. Hydrofluoric acid is commonly used to change the colour of the rust in fabric. Oxalic acid can also be used as a rust remover. This chemical while much slower to use is a safer alternative to rust removal. Both chemicals create a chemical reaction with rust, changing it into colourless compounds. When using an acid as a rust-removing agent, technicians should neutralise and rinse it thoroughly. Rinsing is important in order to remove as much of the residue as possible. Then it should be thoroughly neutralised with an alkaline solution (remember to rinse well because neutralising hydrofluoric acid with an alkaline can produce deadly phosgene gas). Finish the process by applying acetic acid.

**CAUTION:** hydrofluoric acid is very dangerous to handle. Handling precautions should always be used.

### 7. Wax stains

### ***Cleaning procedure:***

One method for safely removing wax from drapery fabric (stable colour assumed) is to place a towel or absorbent paper over the wax and iron the towel or paper. Make sure that iron is on medium setting and never left unattended while turned on.

## ***Unidentifiable Stains***

If a stain cannot be identified, then you may still have a chance of successfully removing it if you use a range of spotters in a particular order. Refer to the manufacturer's directions but as a rule of thumb use solvents first, then neutral detergents, then alkaline solutions then acids.

### ***Cleaning procedure:***

1. Volatile dry solvent (VDS) is the first chemical to be used when attempting to suspend an unknown stain. Apply dry solvent with a cloth, agitate and then absorb with a clean dry cloth.
2. If the stain does not respond to the treatment, then use a non-volatile dry solvent (NVDS) to allow more dwell time. Most non-volatile dry spotters must be thoroughly flushed with a volatile dry spotter following use.
3. Blot volatile dry solvent well and dry thoroughly before using a water based solution.
4. Alternatively, a water-linked solvent can be applied, blotted or dry vacuumed and then rinsed well.
5. Apply a neutral detergent spotter. Allow time to dwell and rinse.
6. Then use a mild alkaline spotter. Rinse well and vacuum excess moisture. Then an acid treatment should be applied to neutralise the alkaline solution. Dry vacuum the area. Do not rinse unless you wish to repeat any of the procedures.
7. Always remember to leave the fabric (particularly those with cellulose or protein fibres) slightly acid.

## ***General Procedures for Treating Stains***

1. Identify and categorise if possible

2. Remove solid build-up first by scraping gently with a bone scraper
3. Apply chemical sparingly. Dry solvents should be applied onto the cloth first and not directly onto the fabric
4. Work from the outside of the stain in to the centre
5. When agitating a chemical into a stain the safest method is to use spotting (tamping) brush and gently tamp in the chemical
6. Allow sufficient dwell time
7. Remove excess chemical by blotting with a cloth or rinse and extract if using a water soluble chemical. Repeat the use of the chemical if it appears there is some level of success before proceeding to the next step. Always rinse water-soluble spotters thoroughly to avoid re-soiling due to residue build-up
8. If stains do not respond fully to treatments point them out to your customer and explain the risk that continued efforts might cause further damage to the furnishings
9. Stains that reappear on fabrics after cleaning and drying are usually caused by spot/stain material or chemical residue that was not completely removed

Some stains (mainly oil or coloured) will respond better if they are treated before the overall cleaning is carried out.

# ***On-Site Mattress Cleaning***

## **Preparation For Any Type Of Mattress Cleaning Job**

### ***Tool Inspection***

1. Check all your equipment
2. Ensure that vacuum motors and pumps are working efficiently (see section on Safety)
3. Check the contact surfaces of all tools to ensure that there are no sharp edges or burrs that can cut or pull threads. If your cleaning tool develops a sharp burr on any part of it that it might touch the fabric, immediately stop using it and remove the burr
4. Check that everything such as brushes hoses and tools are in good condition, and clean

### ***Preparation of Work Environment***

1. Ask customers to keep children and pets well away from the work area. \
2. Clear a suitable space in which to work.
3. Cover surfaces with drop sheets or masking sheets to protect them.
4. Ensure the mattress is treated in an area with good ventilation
5. If extraction equipment is used, set up extraction equipment in a safe place, and arrange hoses to minimise trip-fall accidents. Cover slippery floors with sheets of fabric and install safety signs. Over-sprays can be slippery and can cause slip fall accidents.
6. Provide adequate ventilation because fumes from the Healthy Mattress solution and other chemicals can build up and cause problems.

7. Check that you have all tools and chemicals to do the job at hand. Fill up spotting bottles.

## ***Equipment Preparation***

- 1) Prepare the Kirby Vacuum for mattress cleaning before entering the customers home.
  - a. Clean the head and body of the vacuum, wipe inside the vacuum head and exhaust spout to remove all soils and clean the brush
  - b. Insert a new HEPA filter vacuum bag
  - c. Ste the vacuum for mattress cleaning by installing the short mattress handle.
- 2) Prepare a clean, black cloth in the display unit for the mattress cleaning demonstration
- 3) Ensure you have clean, white towels on hand for treating the mattress
- 4) Prepare the “Injectimate” on the Meditech container if you are undertaking a Deluxe Mattress clean. Alternatively, you may wish to use a large hypodermic syringe.

# **The Healthy Mattress Solution**

The Healthy Mattress Solution is a cleaning system designed for the cleaning of a typical mattress. In the case that the mattress is affected by blood or other contaminants such as urine, the Deluxe mattress clean should be carried out.

The Healthy Mattress solution removes dead skin and dust mite faeces, kills dust mites, viruses, bacteria, fungi and germs and treats the “yellow staining” of mattress and pillows. The Deluxe mattress cleaning performs the functions of the Healthy Mattress clean and also removes decontamination

## ***The Healthy Mattress Solution***

### ***Firstly...***

1. Always wear a face mask when handling solid waste matter. This is a potent source of germs and bacteria and will make you sick.
2. Always use gloves when handling all chemicals as they will affect the skin.
3. Remember that the mattress is a part of the customer's personal space. Show due respect.

### ***Sell the service!***

Suggest to the customer that you vacuum the mattress as a quick example of what is present. Using a black display cloth vacuum a small area of the mattress with several passes and then show the matter collected in the display cloth to the client. This part of the process is very important as it displays to the client the quantity of dead skin and other matter that the cleaning process will remove. Yellow, greenish and brownish tinges show evidence of active moulds. Once you have shown the customer and they have agreed to the service, you can proceed with the clean.

If the mattress clean is already scheduled, then still perform the demonstration with the display cloth. This will demonstrate to the customer what is being removed from the mattress. This is important from the customers' perspective as when we perform the Healthy Mattress Clean, we clean for health and there is often minimal visual difference in the appearance of the mattress.

## ***Cleaning the mattress***

1. Undertake a thorough pre-inspection of the mattress and pillows to ensure the mattress can be cleaned and treated and that the results will match the clients' expectations. Ensure that you check both top and bottom of the mattress for excessive staining during this process. Look for contamination that may require the deluxe mattress clean.
2. Vacuum the mattress and pillows with a Kirby Vacuum with a new HEPA filter bag. Vacuum the top, bottom and all 4 sides of the mattress and each pillow in slow even strokes ensuring you pass over each area of the mattress twice in both directions (4 passes in total). Pay particular attention to the ticking/piping where thorough vacuuming is required. This whole process should take:

8 to 12 minutes for a single mattress

12 to 15 minutes for double mattress

15 to 18 minutes for a Queen Mattress

20 to 25 minutes for a King Mattress

3. Spray Dry-Solve E onto areas of the mattress affected by body oils and wipe off with a white absorbent towel. This will remove a large amount of the body oils on the mattress.
4. Apply The Healthy Mattress Solution to the mattress per directions on the container to the mattress and pillows. Ensure adequate ventilation. Agitate into the mattress with a brush, do not towel off. Use the following quantities of Healthy Mattress solution:

Single Mattress – 125 ml (1 small bottle). To treat mattress and 1 pillow.

Double Mattress – 250ml (1 large bottle). To treat mattress and 2 pillows

Queen Mattress – 375ml (1 small bottle and 1 large bottle). To treat mattress and 4 pillows

King Mattress – 500 ml (2 large bottles). To treat mattress and 4 pillows.

5. Apply mattress stain remover to mattress and pillows as required. This product is an oxidizing product that will remove or substantially lighten any yellow stains that have built up on the mattress or pillows over a period of time. For fastest and best results expose the treated areas of the pillow and mattress to UV light for up to half an hour after treatment.



### ***Important Notes:***

1. Always use a clean vacuum for the bed cleaning process
2. Never walk into the premises with the vacuum in the upright position as if it is to be used for carpet cleaning – always have it assembled ready to clean a mattress.
3. This process is not designed for the treatment of urine stains or other bodily contaminants such as blood etc.
4. The pricing includes the application of the healthy mattress solution and the mattress and pillow stain remover.
5. Always wear gloves when applying the mattress and pillow stain remover.

# **The Deluxe Mattress Clean**

The Deluxe Mattress Solution is a process designed to decontaminate and sterilize a soiled mattress. It includes the benefits of the Healthy Mattress Solution but also removes urine contamination and odours, urine stains and other contaminations such as blood etc.

Again, you should try and sell the service to customer and proceed once the customer understands the benefits of the system.

## ***Cleaning the mattress***

1. Undertake a thorough pre-inspection of the mattress and pillows to ensure the mattress can be cleaned and treated and that the results will match the client's expectations. Ensure that you check both top and bottom of the mattress during this process. Check for decontamination including urine and blood.
2. In performing the Deluxe Mattress clean, you will need to perform a colourfast test to ensure that colour will not run from the mattress fabric, as a hot water extraction will be performed.
3. Vacuum the mattress and pillows with a Kirby Vacuum with a new HEPA filter bag. Vacuum the top, bottom and all 4 sides of the mattress and each pillow in slow even strokes ensuring you pass over each area of the mattress twice in both directions (4 passes in total). Pay particular attention to the ticking/piping where thorough vacuuming is required. This whole process should take:

8 to 12 minutes for a single mattress

12 to 15 minutes for double mattress

15 to 18 minutes for a Queen Mattress

20 o 25 minutes for a King Mattress

4. Wipe over the areas of the mattress affected by body sweat and oils with Drysolve-E on a clean white rag. This will remove a large amount of the body oils on the mattress.
5. Identify any areas of the mattress that have been effected by urine or other contamination (this will be done by sight, smell and with the use of "wet-check" or "hydrosensor". A UV light is also effective)

6. Inject 5 ml of Meditech into the contaminated area per 5 centimetre square area that is affected by the urine, blood or other contamination such as vomit or milk. This process is designed to kill the bacteria, neutralize the urine and remove the odour in the mattress that is associated with the urine. This process will only be successful for mild contamination.
7. Treat the mattress for any blood stains or other contamination stains at this point in time. Use the appropriate spotting treatment and process.
8. Perform a wet-clean of contaminated areas of the mattress at 50 p.s.i. using tap warm water and towel off. If there have been contaminants from bodily fluid then topically treat the affected areas of the mattress with a viricide such as Meditech at a dilution ratio of 4:1.
9. Apply The Healthy Mattress Solution to the mattress per directions on the container to the mattress and pillows. Ensure adequate ventilation. Agitate into the mattress with a brush, do not towel off. Use the following quantities of Healthy Mattress solution:

Single Mattress – 125 ml (1 small bottle). To treat mattress and 2 pillows

Double Mattress – 250ml (1 large bottle). To treat mattress and 2 pillows

Queen Mattress – 375ml (1 small bottle and 1 large bottle). To treat mattress and 4 pillows

King Mattress – 500 ml (2 large bottles). To treat mattress and 4 pillows.

10. Apply UST to any urine stains. This product should be sprayed directly onto the stains. UST is an oxidizing stain removing product and will be effective over a period of time. Do not expose areas treated by UST to UV light as it may result in bleaching. Always apply oxidizers after a wet clean, not before.
11. Apply mattress stain remover to mattress and pillows as required. This product is an oxidizing product that will remove or substantially lighten any yellow stains that have built up on the mattress or pillows over a period of time. For fastest and best results expose the treated areas of the pillow and mattress to UV light after treatment.
12. Use an airmover on low speed to dry the mattress for as long as possible before leaving the premises.

### ***Important Notes:***

1. Always use a clean vacuum for the bed cleaning process
2. Never walk into the premises with the vacuum in the upright position as if it is to be used for carpet cleaning – always have it assembled ready to clean a mattress.
3. The wet-clean is only necessary in the case of urine stains or the treatment of urine, blood or other contaminants. Only undertake the wet-clean in the affected areas.
4. This pricing includes the urine stain treatment, application including injection of Meditech, the application of the healthy mattress solution and the mattress and pillow stain remover.
5. Always wear gloves when applying the mattress and pillow stain remover.