

COSHH Assessment: Disinfectant Products

Magic Touch Cleaning Solutions Ltd

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1. Purpose and scope

This assessment is made under regulation 6 of the Control of Substances Hazardous to Health Regulations 2002, which prohibits work liable to expose any employee to a substance hazardous to health unless a suitable and sufficient assessment has been carried out. It covers the dilution, application, storage, spillage response and disposal of disinfectant products by operatives of Magic Touch Cleaning Solutions Ltd, whether on client premises or at the company's storage location.

This assessment is to be read together with the supplier's current safety data sheet for each product in use. It replaces all earlier disinfectant COSHH assessments issued by or on behalf of the company, which are withdrawn.

2. Assessment details

Item	Detail
Activity assessed	Hard surface disinfection using diluted disinfectant products
Products covered	Quaternary ammonium compound (QAC) disinfectant concentrates, see section 3
Equipment used	Bucket, mop, cloth, trigger spray, personal protective equipment
Assessment carried out by	The Director, Magic Touch Cleaning Solutions Ltd
Date of assessment	27 June 2026
Safety data sheets	The current supplier safety data sheet for each product listed in the product schedule is held with this assessment

3. Products covered

At the date of issue this assessment covers pine type disinfectant concentrates based on quaternary ammonium compounds, containing benzalkonium chloride at 1 to 5% in the concentrate. These are supplied as liquid concentrates and diluted with water as directed on the product label before use as a hard surface disinfectant and sanitiser.

The company maintains a product schedule with this assessment listing each named product, its supplier and the date of the safety data sheet held. The schedule forms part of this assessment. A product may not be brought into use until it has been added to the schedule and its current safety data sheet obtained and checked against sections 5, 10 and 13 of this assessment.

Disinfectants are biocidal products regulated in Great Britain under the GB Biocidal Products Regulation. Operatives must use these products only for the purpose, at the dilution and in the manner stated on the product label. Suppliers are required to provide a safety data sheet for hazardous products under UK REACH, and the company obtains one for every product in use.

4. Task description and method of use

The operative measures the concentrate, dilutes it with cold water in a bucket or trigger spray bottle at the rate stated on the label, and applies the solution to hard surfaces by cloth or mop. Cold water is used because hot water increases vapour and mist. Application by cloth or mop is preferred to fine spraying where practicable, as it reduces airborne mist.

Exposure during a typical task is short and intermittent. Tasks recur daily across cleaning assignments.

Disinfectant products must never be mixed with other cleaning chemicals, including bleach. Mixing can release harmful gases or destroy the disinfecting action of the product.

5. Hazard identification

Classification of chemical products in Great Britain is governed by the GB CLP Regulation. The classification of any individual product is stated in section 2 of its safety data sheet, which is the authoritative source. The general position for the product class covered by this assessment is as follows.

Benzalkonium chloride is corrosive in concentrated form and is very toxic to aquatic life. In disinfectant concentrates at 1 to 5% it may cause skin and serious eye irritation. At the in-use dilution the working solution is typically not classified as hazardous. The greater hazard therefore arises when handling the concentrate, in particular during measuring and dilution.

Known health effects:

Route	Effect
Skin	Irritation and drying of the skin. Prolonged or repeated wet contact can lead to dermatitis
Eyes	Irritation is likely on contact. Splashes of concentrate present a risk of serious eye damage
Ingestion	Irritation of the mouth, throat and stomach. May cause abdominal pain, nausea, vomiting or diarrhoea
Inhalation	Low risk in normal use. Fine spray mist may irritate the nose and airways

The current edition of EH40/2005 Workplace exposure limits does not list a workplace exposure limit for benzalkonium chloride. Exposure is therefore controlled through the measures in sections 9 and 10.

6. Persons at risk

Operatives carrying out the task are the persons principally at risk. Other persons on the premises may also be affected: client staff, visitors, children and animals, chiefly through contact with wet surfaces or access to unattended containers. Persons with sensitive skin, existing skin conditions or asthma may be more susceptible to the effects described in section 5 and must report any reaction to their supervisor.

7. Routes, duration and level of exposure

The main route of exposure is skin contact with the diluted solution. Eye splash is possible during measuring and dilution of the concentrate. Inhalation of mist can occur during spray application. Accidental ingestion is foreseeable only through poor container control, which section 11 addresses.

Duration of exposure is short. The level of exposure is low when the control measures in this assessment are applied.

8. Risk evaluation

Risk category with control measures applied: LOW.

The controlling case is the handling of undiluted concentrate during measuring and dilution. The control measures and personal protective equipment in sections 9 and 10 are set against that case, and they cover the lower risk application stage as a consequence.

9. Control measures

For operatives:

1. Use the product only at the in-use dilution stated on the label. Never apply concentrate directly to surfaces.
2. Dilute with cold water, using the dosing cap or a measured container.
3. Ventilate the work area where practicable by opening windows or doors.
4. Apply by cloth or mop in preference to fine spray where the task allows.
5. Keep products in their original labelled containers. Never decant into unmarked containers or into food or drink containers.
6. Cover cuts and abrasions with waterproof dressings before work.
7. Do not eat, drink or smoke during use. Wash hands after use and before breaks.
8. Do not mix with any other chemical product.

For other persons in the location:

1. Place wet floor signage and restrict access while treated surfaces remain wet.
2. Remove or secure all containers when the task is complete. Never leave products unattended in areas accessible to children or animals.

10. Personal protective equipment

Personal protective equipment is provided by the company free of charge, as required by the Personal Protective Equipment at Work Regulations 1992 as amended by the Personal Protective Equipment at Work (Amendment) Regulations 2022. For this task the company provides:

Item	When required
Protective gloves (household rubber or single-use nitrile)	At all times when diluting or applying the product
Eye protection (safety goggles)	When handling the concentrate, and wherever there is a risk of splashing
General workwear	At all times

Damaged or degraded items are replaced before further use. Personal protective equipment is a supplementary control and does not replace the measures in section 9.

11. Storage and handling

Products are stored in a cool, dry, ventilated area, in their original closed containers, upright and out of direct sunlight. They are kept away from incompatible chemicals, in particular bleach and acids, and secured against access by children and unauthorised persons. On client premises, products are stored only in locations agreed with the client and are removed at the end of the assignment unless the client agrees otherwise.

12. Spillage procedure

Contain the spillage and prevent it entering drains or watercourses; benzalkonium chloride is very toxic to aquatic life. Absorb small spills with paper towel or cloth, and larger spills with sand, earth or another inert absorbent. Place used absorbent in a container for disposal in accordance with section 14. Rinse the affected area with water. Wear the personal protective equipment listed in section 10 throughout.

13. First aid

First aid provision on each assignment meets the Health and Safety (First-Aid) Regulations 1981.

Route	Action
Skin contact	Rinse with plenty of water. Seek medical attention if irritation continues
Eye contact	Rinse immediately with plenty of water for at least ten minutes, holding the eyelids open. Seek medical attention if irritation continues, and in every case of contact with the concentrate
Ingestion	Do not induce vomiting. Rinse the mouth thoroughly and drink plenty of water. Seek medical attention
Inhalation	Move the person to fresh air. Seek medical attention if discomfort continues

All incidents are recorded in the accident book. Incidents that meet a reporting threshold are reported under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013.

14. Disposal

The company observes the duty of care in section 34 of the Environmental Protection Act 1990 for all waste arising from its work. Diluted in-use solution may be discharged to the foul drain with plenty of water where the client's site rules permit. Concentrate must never be poured to drain. Empty containers are rinsed and disposed of through an appropriate waste stream in accordance with local authority requirements and the client's site arrangements.

15. Training, information and supervision

Operatives receive COSHH training before their first assignment, covering the hazards in this assessment, the control measures, dilution practice, spillage response and first aid. Toolbox talks reinforce this training at intervals and whenever a product or method changes. Each operative has access to this assessment and to the safety data sheets for the products in use, and training is delivered so that the operative understands it in his or her working language. Supervisors check compliance with this assessment as part of routine site supervision.

16. Health surveillance

Health surveillance under regulation 11 of the Control of Substances Hazardous to Health Regulations 2002 is not required for these products at the assessed level of exposure. Operatives are instructed to report dryness, redness, cracking or any other skin complaint at an early stage. Any such report triggers a review of this assessment and of the affected operative's working practice.

17. Monitoring and review

This assessment is reviewed at least every twelve months. It is reviewed sooner if the products or working methods change, if a supplier issues a revised safety data sheet, if an incident or health complaint occurs, or if there is any other reason to believe it is no longer valid. The review date is recorded in the document control block below.

18. Legislation and guidance

This assessment is made under, and reflects, the following legislation as it applies in Great Britain at the date of issue:

1. Health and Safety at Work etc. Act 1974
2. Control of Substances Hazardous to Health Regulations 2002 (as amended)

3. Management of Health and Safety at Work Regulations 1999
 4. Personal Protective Equipment at Work Regulations 1992, as amended by the Personal Protective Equipment at Work (Amendment) Regulations 2022
 5. Health and Safety (First-Aid) Regulations 1981
 6. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
 7. Environmental Protection Act 1990, section 34
 8. GB CLP Regulation: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as assimilated into the law of Great Britain
 9. GB Biocidal Products Regulation: Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products, as assimilated into the law of Great Britain
 10. UK REACH: Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as assimilated into the law of Great Britain, Article 31 (safety data sheets)
- Guidance consulted: EH40/2005 Workplace exposure limits (HSE) and the Approved Code of Practice L5, Control of Substances Hazardous to Health (sixth edition, HSE).

Document Control

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Signed: 

Abdulfattah Mahmoud Alkidra, Director

For and on behalf of Magic Touch Cleaning Solutions Ltd

Date: 27-06-2027