# SAFETY DATA SHEET

Revision: 10 August 2020 Version number: 4.1

## SECTION 1: Identification of the substance/mixture and company/undertaking

**1.1 Product identifier** — **Patio Magic**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Hard surface biocide

Uses advised against: not available.

**1.3 Details of the supplier of the safety data sheet**

Brinton Products Ltd.
24 Roseneath Road
London SW11 6AH
Tel 0845 2505976; Fax 0870 429 2035
admin@brintonproducts.co.uk

**1.4 Emergency telephone number** — 01865 407333

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008: Skin Irrit 2, H315; Eye Dam 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 2, H411.

See Section 16 'Other information' for full text of the H-statements.

### 2.2 Label elements

Signal word: Danger

Hazard statements:
Causes skin irritation.
Causes serious eye damage.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statements

prevention:
Do not breathe mist/spray.
Wear protective gloves and eye/face protection.
Collect spillage.

response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

storage: None.

disposal: Dispose of contents/container in accordance with local/national regulation.

Supplemental information: None.

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**2.3 Other hazards** Not available.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** [a,b]

| *Declarable components* | *Conc. (wt%)* | *EC No.* | *CAS No.* | *Reg. No.* | *Classification* |
|---|---|---|---|---|---|
| Benzalkonium chloride (BAC) [c] | 5–10 | 270-325-2 | 68424-85-1 | NA | Acute Tox 4, H302; Skin Corr 1B, H314; Eye Dam 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 |
| C9-11 Alcohol, ethoxylated | Ca. 1 | NA | 68439-46-3 | NA | Acute Tox 4, H302; Eye Dam 1, H318 |
| | | | | | |
| *Other components* | | | | | |
| Water | >75 | 231-791-2 | 7732-18-5 | NA | Not classified |

[a] NA: not available.

[b] See Section 16 'Other information' for full text of the H-statements.

[c] Full name: Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides.

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

Inhalation: If inhalation is suspected, remove exposed person to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, call a doctor.

Skin: Wash with plenty of soap and water. Call a doctor if irritation or other symptoms occur. Wash contaminated clothing before re-use.

Eye: In case of contact with eyes, irrigate with room-temperature water for several minutes, occasionally lifting eyelids. Speed is essential. Remove any contact lenses if easy to do. Continue rinsing. Get immediate medical attention.

Ingestion: If swallowed, rinse mouth thoroughly and give water to drink. Get medical attention. Do not induce vomiting, unless instructed by medical personnel.

**4.2 Most important symptoms and effects, both acute and delayed** Causes burns to eye, and digestive tract. Causes skin irritation. Inhalation of mist or spray may irritate or burn the respiratory system.

**4.3 Indication of any immediate medical attention and special treatment needed** Treat symptoms as they occur. Dilution of the product with water will reduce its hazardous properties.

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## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

| | |
|---|---|
| Suitable | Water spray, carbon dioxide, dry chemical powder and alcohol-resistant foam are recommended. |
| Unsuitable | Not available |

**5.2 Special hazards arising from the substance or mixture** — The product is an aqueous solution, and is not flammable. However, if involved in a fire product may produce hazardous vapours and gases.

**5.3 Advice for firefighters** — Remove product from fire or cool with water spray. Firefighters should wear self-contained breathing apparatus and full protective clothing.

Prevent water from firefighting from entering water-courses or drainage system.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures** — For large spills, wear personal protection. Keep unauthorised personnel from the spillage area. May cause slip hazard. Follow prescribed procedures for responding to spills and reporting to authorities.

**6.2 Environmental precautions** — Prevent product from entering water courses or drainage system by using bunding or absorption with inert material.

**6.3 Methods and material for containment and cleaning up** — Stop the source of leak or release. Clean up spill as soon as possible.

For small quantities, wipe off with cloth or paper, and wash affected area with water and detergent.

For large quantities, recover by using appropriate techniques such as pumping, or absorption with an inert material such as dry sand. Wash contaminated surfaces with water.

Collect spill, contaminated materials, and washings in a container for disposal.

**6.4 Reference to other sections** — For recommended personal protective equipment, see Section 8.

For disposal considerations, see Section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling** — Avoid contact with skin and eyes. Wear protective clothing as in Section 8. Good general ventilation is recommended. Wash hands after handling.

**7.2 Conditions for safe storage, including any incompatibilities** — Keep containers in a cool, dry place.

Minimum recommended storage temperature: 10 °C. Protect from frost.

**7.3 Specific end use(s)** — Not available.

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

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| | |
|---|---|
| EU limit values | None. |
| UK limit values | None. |
| Monitoring procedure | BS EN 14042:2003; Workplace Atmospheres; Guide for the Application and Use of Procedures for the Assessment of Exposure to Chemical and Biological Agents, or specific national equivalent. |
| Other: human health (DNELs, DMELs) | BAC: DNELs: workers, long-term exposure, systemic effects, inhalation, 3.96 mg/m$^3$; workers, long-term exposure, systemic effects, dermal, 5.7 mg/kg/d. |
| Other: environmental (PNEC) | BAC: PNECs: freshwater, 0.001 mg/L; sewage treatment plant, 0.4 mg/L; freshwater sediment, 12.27 mg/kg dry sediment; soil, 7 mg/kg dry soil. |

### 8.2 Exposure controls

| | |
|---|---|
| Engineering controls | Good general ventilation is recommended for the workplace. |
| Personal protective equipment | For professional use, the need for personal protective equipment should be based on a workplace risk assessment for the particular use.<br>Avoid skin and eye contact by wearing chemical resistant gloves (eg nitrile rubber, 0.4 mm thickness) and safety goggles. Where more extensive contact may occur, wear protective clothing (eg overalls, boots). Wear respiratory protective equipment if exposure to spray is possible. PPE should be to European (EN) standards. |
| Environmental exposure controls | Not available. |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Appearance | Clear liquid |
| Odour | Bland |
| Odour threshold | Not available |
| pH | Neutral |
| Melting/freezing point | Not available (0 °C for water) |
| Initial boiling point/range | Not available (100 °C for water) |
| Flash point | Not available |
| Evaporation rate | Not available |
| Flammability (solid, gas) | Not applicable |
| Flamm. or expl. limits | Not available |
| Vapour pressure | Not available (2310 Pa at 20 °C for water) |
| Vapour density | Not available |
| Relative density | 0.995 |
| Solubilities | Soluble in water |
| Partition coeff. (log $K_{ow}$) | BAC: 2.96 (calculated) |

| | |
|---|---|
| Auto-ignition temp. | Not available |
| Decomposition temp. | Not available |
| Viscosity | Not available |
| Explosive properties | Not available |
| Oxidising properties | Not available |

**9.2 Other information** Not available

## SECTION 10: Stability and reactivity

**10.1 Reactivity** Not available.

**10.2 Chemical stability** Stable under recommended storage conditions. No hazardous polymerisation.

**10.3 Possibility of hazardous reactions** Not available.

**10.4 Conditions to avoid** Avoid storage at high temperatures, or in direct sunlight.

**10.5 Incompatible materials** Water-reactive substances, acids, and strong oxidizing agents.

**10.6 Hazardous decomposition products** Not available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

| | |
|---|---|
| Acute toxicity | The product is not expected to meet the criteria for classification by the oral, dermal or inhalation routes.<br>BAC: $LD_{50}$ (oral, rat), 795 mg/kg; $LD_{50}$ (dermal, rabbit), 3412 mg/kg. |
| Skin corrosion/irritation | Not classified as corrosive (test on mixture). Expected to be irritant based on ingredients.<br>May cause irritation of the linings of the mouth, throat and gastro-intestinal tract.<br>BAC: classified as corrosive to skin. |
| Serious eye damage/irritation | Ocular irritation and damage may occur.<br>BAC: classified as causing serious damage to eyes. |
| Respiratory or skin sensitisation | Based on available information, the product is not expected to meet the criteria for classification.<br>BAC: not sensitising (maximisation test in the guinea pig). |
| Germ cell mutagenicity | Based on available information, the product is not expected to meet the criteria for classification. |
| Carcinogenicity | Based on available information, the product is not expected to meet the criteria for classification. |
| Reproductive toxicity | Based on available information, the product is not expected to meet the criteria for classification. |

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| | |
|---|---|
| STOT-single exposure | Based on available information, the product is not expected to meet the criteria for classification. |
| STOT-repeated exposure | Based on available information, the product is not expected to meet the criteria for classification. |
| Aspiration hazard | Based on available information, the product is not expected to meet the criteria for classification. |

## SECTION 12: Ecological information

**12.1 Toxicity**

The product is expected to be very toxic to aquatic organisms, and may cause long-lasting effects.

BAC: very toxic to aquatic organisms. $LC_{50}$ (fish, 96 h), 0.515 and 0.85 mg/L; $EC_{50}$ (Daphnia magna, 48 h), 0.016 mg/L; Daphnia (21 d reproduction test) NOEC, 0.025 mg/L; $E_rC_{50}$ (algae, 72 h), 0.03 mg/L (NOEC, 0.009 mg/L mg/L); $EC_{20}$ (activated sludge, 0.5 h), 5 mg/L. M-factor (acute), 10; M-factor (chronic), 1.

**12.2 Persistence and degradability**

BAC: rapidly biodegradable (>60% in OECD 301 D closed-bottle test).

**12.3 Bioaccumulative potential**

BAC: not bioaccumulative (bioconcentration factor 79, 35 d, bluegill sunfish).

**12.4 Mobility in soil**

BAC: immobile in soil.

**12.5 Results of PBT and vPvB assessment**

BAC: does not meet the criteria for PBT or vPvB.

**12.6 Other adverse effects**

Not available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

The recommended disposal for industrial or professional use is incineration. Small amounts of product may be suitable for dilution and disposal via the drains or in landfill.

Disposal must be in accordance with current national and local regulations. For professional use, chemical residues generally count as special waste, and their disposal may be regulated in the EC member countries through corresponding laws and regulations. General EU requirements are given in the Waste Framework Directive (75/442/EEC) and the Hazardous Waste Directive (91/689/EEC).

## SECTION 14: Transport information

**14.1 UN Number**

3082

**14.2 UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N O S (contains benzalkonium chloride)

**14.3 Transport hazard class(es)**

9

**14.4 Packing group**

III

**14.5 Environmental hazards**

Marine pollutant/environmentally hazardous

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| | |
|---|---|
| **14.6 Special precautions for user** | Not available |
| **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable |

## SECTION 15: Regulatory information

| | |
|---|---|
| **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture** | *UK*: UK: Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended (also implementing 90/394/EEC on carcinogens at work).<br>COSHH Essentials: Easy Steps to Control Chemicals; HSE Books 2003 (also available on the HSE web site).<br>Workplace Exposure Limits EH40/2005 (Third edition, 2018); Health and Safety Executive.<br>The Control of Pesticides Regulations (COPR), 1986, as amended. HSE No 8579.<br>The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.<br>*Ireland*: PCS number 95346. |
| **15.2 Chemical safety assessment** | Not available. |

## SECTION 16: Other information

| | |
|---|---|
| Revisions | Superceding version 4 of 11 June 2019, this version 4.1 includes the UK HSE number and Irish PCS number in Section 15.<br>This SDS is the fourth version in EU format, superseding version three of 7 December 2017. The ethoxylated alcohol is a new ingredient. Updated toxicological and ecological data on BAC has been added. |
| Abbreviations | DNEL, derived no-effect level; DMEL, derived minimum effect level; EC, effect concentration; NOEC, No-observed-effect-concentration; PBT, persistent, bioaccumulative, and toxic; STOT RE, specific organ toxicity repeated exposure; STOT SE, specific target organ toxicity single exposure; vPvB, very persistent, very bioaccumulative. |
| References | Search for chemicals; available at the European Chemicals Agency (ECHA) website: http://echa.europa.eu/.<br>Supplier safety data sheets. |
| Basis of classification | The mixture is self-classified on the basis of available information on the ingredients. |
| List of hazard statements | H302: Harmful if swallowed; H314: Causes severe skin burns and eye damage; H315: Causes skin irritation; H318: Causes serious eye damage; H400: Very toxic to aquatic life; H410: Very toxic to aquatic life with long lasting effects; H411: Toxic to aquatic life with long lasting effects. |