

## Section 1: Identification of the Substance/Mixture and of Supplier

**Product name:** **Q-SAN**  
**MPI Approved C43 (All animal product except dairy)**  
**Recommended use:** As a hospital grade disinfectant  
**Supplier:** Space Industries Limited  
**Street Address:** 160 Plunket Ave,  
 Wiri, Auckland  
 New Zealand  
**Telephone Number:** + 64 9 262 3902  
**Facsimile:** + 64 9 262 3948  
**E-mail:** [orders@spaceindustries.co.nz](mailto:orders@spaceindustries.co.nz)  
**Website:** [www.spaceindustries.co.nz](http://www.spaceindustries.co.nz)  
**Emergency Telephone** 0800 764 766 (all hours)  
**Date of preparation:** 06 August 2019

## Section 2: Hazards Identification

**ERMA Approval Code:** HSR002530  
**Hazard Classification:** 6.1D (oral), 6.3A, 6.4A, 9.3C

## Section 3: Composition/information on ingredients

**Product Description:** As a hospital grade disinfectant  
**Component(s):** Benzalkonium chloride  
 N-alkyl (C12-16) dimethyl benzyl ammonium chloride  
**CAS Number** 68424-85-1  
**Proportion** 25%

## Section 4: First Aid Measures

### Show this Safety Data Sheet to a Doctor

**Inhalation:** If fumes or combustion products are inhaled, remove from contaminated area. Lay patient down, keep warm and rested. Remove prostheses (false teeth) prior to initiating first aid, where possible, this may block airway. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital or doctor. Inhalation of vapours or aerosols (mists/fumes) may cause lung oedema. Corrosive substances may cause lung damage (fluid in the lungs). Reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest and must be kept under medical observation even if no symptoms are (yet) manifested. Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. This must definitely be left to a doctor or person authorised by him/her. (ICSC13719)

|                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skin Contact:</b>                                                        | Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Eye Contact:</b>                                                         | Irrigate eyes with generous quantities of water for 15 minutes. Remove contact lenses, if present and easy to do. Seek immediate medical attention.                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Ingestion:</b>                                                           | Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical attention immediately. |
| <b>Notes for the Doctor:</b>                                                | Probable mucosal damage may contraindicate use of gastric lavage. Single dose of activated charcoal is the recommended gastrointestinal decontamination procedure.- Adult 50-100g, Child 1-2 g/kg.                                                                                                                                                                                                                                                                                                                                    |
| For advice, contact the Poisons Information Centre 0800 764 766 or a doctor |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

### Section 5: Fire Fighting Measures

|                                      |                                                                                                                                                   |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specific Hazards:</b>             | The product is not flammable. Hazardous products of combustion: Toxic organic vapours, amines, oxides of carbon and nitrogen & hydrogen chloride. |
| <b>Suitable Extinguishing Media:</b> | Extinguish fires with water spray, foam, carbon dioxide or dry chemical powder.                                                                   |
| <b>Fire-fighting advice:</b>         | Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment.                      |

### Section 6: Accidental Release Measures

|                                                           |                                                                                                                                                                                                        |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Emergency Procedures</b>                               | Spillages are slippery. Keep spectators away – rope off the area. Avoid accidents, clean up immediately. Ensure adequate ventilation. Wear protective equipment to prevent skin and eye contamination. |
| <b>Methods and Materials for Containment and Clean Up</b> | Carefully scoop up or shovel up uncontaminated product for re-use. Sweep up contaminated material and dispose of in an area approved by local authority by-laws.<br><br>Do not flush down drain.       |

### Section 7: Handling and Storage

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling:</b> | <ul style="list-style-type: none"> <li>• Ensure an eye bath and safety shower are available and ready for use.</li> <li>• Observe good personal hygiene practices and recommended procedures.</li> <li>• Do not breathe in dust.</li> <li>• Wash hands thoroughly after handling.</li> <li>• Do not eat, drink or smoke when using this product.</li> <li>• Store away from foodstuffs.</li> <li>• Avoid eye and skin contact.</li> <li>• Keep only in original container.</li> <li>• Store in a cool, dry, well-ventilated area.</li> </ul> |
| <b>Storage:</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|  |                                                                                                                                                                                                                        |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Keep containers tightly closed when not in use.</li> <li>• Inspect regularly for deficiencies such as damage or leaks.</li> <li>• Protect against physical damage.</li> </ul> |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Section 8: Exposure Controls/Personal Protection

|                                       |                                                                                                               |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Occupational Exposure Limits:</b>  | No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH). |
| <b>Engineering Control Measures:</b>  | Use good industrial hygiene.<br>Use in well ventilated area.<br>Avoid breathing in vapours                    |
| <b>Personal Protective Equipment:</b> | Safety glasses with side shields.<br>PVC gloves<br>Safety footwear<br>Waterproof apron                        |

### Section 9: Physical and Chemical Properties

|                                  |                           |
|----------------------------------|---------------------------|
| <b>Physical state:</b>           | Liquid                    |
| <b>Colour:</b>                   | Colourless to pale yellow |
| <b>Odour:</b>                    | Slight almond             |
| <b>Boling/melting Point:</b>     | 100°C                     |
| <b>Solubility in water:</b>      | Soluble                   |
| <b>Specific Gravity/Bulk</b>     | Not available.            |
| <b>Vapour Pressure:</b>          | Practically none          |
| <b>Flash Point (°C):</b>         | None                      |
| <b>Percent Volatilise:</b>       | 50% at 100°C              |
| <b>Flammability Limits:</b>      | Not available             |
| <b>Autoignition Temperature:</b> | Not available             |
| <b>PH 1% Solution:</b>           | 8                         |

### Section 10: Stability and Reactivity

|                                         |                                                                                                                          |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Stability:</b>                       | Product is stable under normal conditions of use, storage and temperature.<br><br>The product is fully soluble in water. |
| <b>Avoid:</b>                           | Contact with strong oxidising/reducing agents.                                                                           |
| <b>Hazardous decomposition products</b> | Toxic organic vapours/fumes, amines, CO, CO <sub>2</sub> , nitrogen oxides, hydrogen chloride.                           |

### Section 11: Toxicological Information

|                   |                      |
|-------------------|----------------------|
| <b>Ingestion:</b> | Harmful if swallowed |
|-------------------|----------------------|

|                      |                                                          |
|----------------------|----------------------------------------------------------|
| <b>Eye contact:</b>  | Corrosive to eyes may cause severe and permanent damage. |
| <b>Skin contact:</b> | Corrosive to skin.                                       |
| <b>Inhalation:</b>   | Capable of causing irritation.                           |

## Section 12: Ecological Information

|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental fate, persistence and degradation:</b> | <p>Avoid contaminating waterways.</p> <p>Biodegradable in concentrations below 20 ppm.</p> <p>12.2 Aquatic toxicity: LC50 Bluegill sunfish: 2.35 ppm 96 hrs (for closely related 80% product)</p> <p>LC50 Rainbow trout: 7.8 ppm 96 hours (for closely related 80% product)</p> <p>Avian toxicity: LC50 Bobwhite quail 2700 ppm 8 days (for closely related 80% product)</p> <p>LC50 Mallard duck &gt;4500 ppm 8 days (for closely related 80% product)</p> |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Section 13: Disposal Considerations

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Recycle wherever possible. Special hazard may exist - specialist advice may be required.</li> <li>Consult approved Waste Management Company for disposal options.</li> <li>Treat and neutralise residue at an approved site.</li> <li>Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.</li> <li>Puncture containers to prevent re-use and bury at an authorised landfill.</li> </ul> <p>Do not incinerate.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Section 14: Transport Information

|                                 |                                                                                                       |
|---------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Road and Rail Transport:</b> | Classified as a non - dangerous Good according to NZS 5433:1999 Transport of Dangerous Goods on Land. |
|---------------------------------|-------------------------------------------------------------------------------------------------------|

## Section 15: Regulatory Information

|                        |                                                |
|------------------------|------------------------------------------------|
| <b>Classification:</b> | 6.1C, 6.5A, 6.5B, 6.9B, 8.2C, 8.3A, 9.1B, 9.3C |
|------------------------|------------------------------------------------|

## Section 16: Other Information

|                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>.Issue Date: 06 August 2019</p> <p>Note: All information given by Space Industries Ltd is offered in good faith and is, to the best of our knowledge, true and accurate. However, since conditions of use are beyond our control, all information relevant to usage is offered without warranty or guarantee and should not be construed as a representation that the product is suitable for any particular purpose or application.</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|