COSHH Data Sheet: Bridge Biotechnology
(91/155/EWG)

Customer usage

Section 1. Identification of Company / Business

Business: -	Production and supply of antibacterial and antimicrobial solutions
Trade Name: -	ESOL™
Business Name: -	Bridge Biotechnology Limited
Address: -	4, Castle Court, Carnegie Campus, Dunfermline, Fife, KY11 8PB, Scotland

Section 2. Information Regarding Constituents

Hazardous Substances present on their own: -

Electrochemical solution of sodium chloride in water. ESOL™ (+) may contain active chlorine compounds in the range of 0 to 0.1 mol/l. Cathode Output (-) may contain sodium hydroxide in the range of 0 to 0.7 mol/l.

Other substances representing a hazard

The solutions contain no compounds applicable to the rules for toxic compounds (67/548/EWG).

Substances present in concentration below minimum danger threshold: -

No known substance in this category present.

Section 3. Identification of Hazards

The solutions are classified as non-dangerous according to (88/279/EWG)

Main Hazard: - The solution, in undiluted form (ORP +1000mV or < -600mV may cause irritation to the eyes, and throat momentarily (in liquid form, not in fogging or spray)

Section 4. First Aid.

As a general rule, in case of doubt, or if symptoms persist, always call a Doctor.

In the event of exposure by Inhalation: -

No known reaction have occurred however should there be an adverse symptom, remove person immediately into fresh air. Should dizziness and nausea persist, call a Doctor.

In the event of splashes or contact with Eyes: -

This product will not harm eyes if it comes in contact with them however it may cause a slight stinging sensation, if this happens flush with fresh water.

In the event of splashes or contact with Skin: -

There is no hazard if contact occurs.

In the event of Swallowing: -

There is no hazard if swallowed in dilution.

Section 5. Fire Fighting Measures.

There are no special requirements for these solutions as they are non-flammable.

Section 6. Action to be taken in the event of spillage

Safety Precautions: -

Avoid spilling onto electrical equipment. The solutions are good conductors and present an electrocution hazard if spilled onto high voltage.

Environmental Safety Precautions: -

These solutions are biodegradable and have a limited active life. There are no potential risks to the environment.

Cleaning Methods: -

Wipe up with absorbent paper towels, there are no special disposal requirements. Solutions will evaporate harmlessly if left.

Section 7. Handling and Storage.

Handling: -

There are no special handling requirements

Fire Prevention: -

There are no special requirements, as these solutions are non-flammable.

Storage: -

Store in a cool dry ventilated area, in sealed HDPE or PET containers and ensure the solutions are correctly labelled. As the ESOL™ (+) and Cathode Output (-) solutions will degrade back into a sodium chloride and water solution, when exposed to the atmosphere; they should be used within 6 months of manufacture.

Section 8. Exposure Control – Personal Safety

Safety Breathing Apparatus: -

No special breathing apparatus is required.

Eye and Facial Protection: -

Safety glasses may be worn to reduce the risk of eye contact. Solutions will dissipate rapidly upon dilution.

Body Protection: -

Normal clothing.

Section 9. Physical Properties

Physical State: -	Liquid at ambient temperatures.
Appearance: -	Clear liquid, as water.
Odour: -	ESOL™ (+) has a Chlorine like odour at full strength. Cathode Output (-) has no odour.
Solubility: -	Completely soluble.
pH Values: -	ESOL (+) 2.5 - 6.5 Cathode Output (-) 10.0 - 13.0
mV Values: -	ESOL™ (+) > + 1000 Cathode Output (-) > - 800
Melting Point: -	0^0 C

Boiling Point: - 100^0 C

Flash Point: - Not applicable

Inflammability: - Not applicable

Density: - 1,000 kg/m^3

Vapour Pressure: - 2,330 Pa @ 20^0 C

Section 10. Stability and Reactivity

Stability: -

Stable under all normal conditions.

Materials to avoid: -

ESOL™ in its undiluted form will eventually oxidise untreated metals including stainless steel below a 316 quality.

Hazardous Decomposition Information: -

Not applicable

Section 11. Toxicological Information

In the event of exposure by inhalation: -

Very low order of toxicity however may cause mild respiratory irritation.

In the event of swallowing: -

Very low order of toxicity.

In the event of splashes or contact with the skin: -

Very low order

In the event of splashes or contact with the eyes: -

Very low order of toxicity however the possibilities of allergic sensitisation should be considered.

Chronic toxicity / carcinogens: -

None

Section 12. Ecological Information

Eco-Toxicity: -

None

Degradability: -

Fully bio-degradable

Bioaccumulation: -

None

Mobility: -

None

Section 13. Disposal Procedures

There are no special disposal procedures

Section 14. Transport Procedures

Not classified as hazardous for transport.

Section 15. Regulatory Information

Not listed

Section 16. Other Information

The information in this document meets the European requirements for safety and health measurements. (91/155/EWG).

The information contained in this document is based on data considered to accurate at the time of publication and is given free of charge. It is representative of typical product, but batches may exhibit minor variations.

No warranty is expressed or implied concerning the accuracy of this data. In case of doubt or for clarification Bridge Biotechnology Ltd should be consulted, as the company are unable to anticipate all conditions under which the product may be manufactured or used. Equipment operators and solution users are advised to carry out an assessment of workplace risk and carry out their own tests to determine Safety and Suitability for their particular process and conditions of use.

This information is intended for the use in the European Union only as different limits may be set in other countries.