

SAFETY DATA SHEET

Environmental Surface Solutions P/L (t/a Eco Active Solutions)	Product: ECO ACTIVE CLEAR
Date of Issue: July 2013	Page 1 of Total 6

SECTION 1 – STATEMENT OF CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER:	Environmental Surface Solutions P/L (t/a Eco Active Solutions)		
ADDRESS:	12 Sugar Glider Lane, Tinbeerwah 4563 Queensland Australia		
Trade Name:	Eco Active Clear		
TELEPHONE:	+61 7 5449 1110	FAX:	+61 7 5449 1119
AH EMERGENCY TELEPHONE:	13 1126 in Australia	ABN:	75 139 284 905
Substance:	Superfine nanoparticle in sol from hydro-synthetic process.	Product Use:	Special homogeneous coating optimization for non-porous & smooth surfaces.
Creation Date:	JULY 2013	Revision Date:	JULY 2018
Product Code:			

SECTION 2 – HAZARDS IDENTIFICATION

GHS - GLOBALLY HARMONISED SYSTEM

GHS Classification	Not hazardous
Pictogram	None allocated.
Signal Word	None allocated.
Hazard Statement(s)	None allocated.
Precautionary statement(s)	
Prevention	None allocated.
Response	None allocated.
Storage	None allocated.
Disposal	None allocated.

ADG CODE

UN Number	none allocated	ADG Classification	none allocated
Shipping Name	none allocated	ADG Subsidiary Risk	none allocated
Hazchem Code	none allocated	Packing Group	none allocated

POISON SCHEDULES

SUSMP Classification	Not scheduled
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EMERGENCY OVERVIEW

Colour	Yellow	Odour	Faint
Physical Description	Solution	Viscosity	Non-viscous
Major Health Hazards	None known		

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication "List of Designated Hazardous Substances" or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication "Approved Criteria for Classifying Hazardous Substances".

Ingredients:	CAS Number:	Proportion:	Exposure Standards TWA	Exposure Standards STEL
Zinc metal	7440-66-6	< 1.0% w/w	not set	not set
Titanium dioxide	13463-67-7	< 1.0% w/w	not set	not set
Isopropyl alcohol	67-63-0	< 1.0% w/w	400 ppm 983 mg/m3	500 ppm 1230 mg/m3
Water	7732-18-5	> 60% w/w	not set	not set

The **TWA** exposure value is the Time Weighted Average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The **STEL** (Short Term Exposure Limit) is an exposure value that should

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not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

SECTION 4 – FIRST AID MEASURES

Scheduled Poisons	Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 0800 764 766).
First Aid Facilities	Normal washroom facilities.
Skin contact	Wash skin with plenty of water. Remove contaminated clothing and wash before re-use. Seek medical advice (e.g. doctor) if irritation, burning or redness develops.
Eye contact	Immediately irrigate with copious quantities of water for at least 20 minutes. Eyelids to be held open. Seek medical advice (e.g. ophthalmologist).
Ingestion	Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. Seek medical advice (e.g. doctor).
Inhalation	Remove victim to fresh air away from exposure. Obtain medical attention if symptoms occur.
Advice to Doctor	Treat symptomatically. All treatments should be based on observed signs and symptoms of distress of the patient. Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons.
Aggravated Medical Conditions	None known.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Water based. Not combustible. However if involved in a fire, packaging, etc may emit toxic fumes.
Extinguishing Media	Use an extinguishing media suitable for surrounding fires.
Fire Fighting	Keep containers exposed to extreme heat cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion or decomposition. Evacuate area - move upwind of fire.
Flash Point	None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures	No HAZCHEM code.
Occupational Release	Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water courses. Wear appropriate protective equipment as in section 8 below to prevent skin and eye contamination. Spilt material may result in a slip hazard and should be absorbed into dry, inert material (e.g. sand, earth or vermiculite), which then can be put into appropriately labelled drums for disposal by an approved agent according to local conditions. Residual deposits will remain slippery. Wash area down with excess water. If contamination of sewers or waterways has occurred advise the local emergency services. In the event of a large spillage notify the local environment protection authority or emergency services.

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SECTION 7 – HANDLING AND STORAGE

Handling

Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with water after handling.

Storage

Store in a cool, dry, place with good ventilation. Avoid storing in aluminium and light alloy containers. Store away from incompatible materials (Section 10). Keep containers closed at all times – check regularly for leaks.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

National Occupational Exposure Limits, as published by National Occupational Health & Safety Commission:

Time-weighted Average (TWA): None established for specific product.

See **SECTION 3** for Exposure Limits of individual ingredients.

Short Term Exposure Limit (STEL): None established for specific product.

See **SECTION 3** for Exposure Limits of individual ingredients.

Exposure guidance - Zinc / Titanium Dioxide / Silicon Dioxide

This material is available only as a non-toxic water-based sol. Inhalation of excessive powder, if created as dust, may cause breathing discomfort.

Powder concentration weight limit (Calculated as powder)

PEL(OSHA): 15 mg/m³, 8 hours TWA

TLV (ACGIH): 10 mg/m³, 8 hours TWA

Biological Limit Value

None established for product.

Engineering Controls

Ensure ventilation is adequate to maintain air concentrations below exposure standards. Avoid generating mists of the product. Use only in a well-ventilated area. Ensure airflow, where this product is used, is directed away from the operators.

Personal Protective Equipment

Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure. Final choice of appropriate protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. The following protective equipment should be available;

Eye Protection



The use of safety glasses with side shield protection, goggles or face shield is recommended to handle in quantity, cleaning up spills, decanting, etc. Contact lenses pose a special hazard ; soft lenses may absorb irritants and all lenses concentrate them.

Skin Protection



Wear gloves if contact with solutions is extended. Work clothes, work boots and gloves are recommended for handling the concentrated product (as per AS/NZS 2161, or as recommended by supplier) to handle in quantity, cleaning up spills, decanting, etc.

Protective Material Types

Material suitable for detergent contact – Butyl rubber, Natural Latex, Neoprene, PVC, and Nitrile.

Respirator



Respiratory protective equipment is not necessary for normal handling but recommended for any aerosol application.

Where high contaminant spray mist or vapour levels exist, ie, approaching the exposure limit, the following additional equipment is required: For elevated exposures, eg, confined spaces, spillages:- Appropriate organic vapour cartridge respirator as per the requirements of AS/NZS 1715 and AS/NZS 1716 (Respiratory protective devices).

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Non-viscous liquid	Colour	Yellowish transparent liquid
Odour	None	Specific Gravity	1.0075-1.01
Boiling Point	Approximately 100 °C	Freezing Point	Approximately 0 °C
Vapour Pressure	Not available	Vapour Density	Not available
Flash Point	Not flammable	Flammable Limits	None
Water Solubility	Miscible in all proportions	pH	7 - 8.5 neat
Volatile Organic Compounds (VOC)	0 % v/v	Average primary particle size	≤ 7 nm Acc. To GB/T 19591-2004
Viscosity	Not available	Odour Threshold	Not available
Evaporation Rate	Not available	Per Cent Volatile	Ca 80% v/v

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability	Stable at normal temperatures and pressure.
Conditions to Avoid	Avoid contact with heat or heat sources. The product should not be refrigerated. The performance and stability of the product will be affected if the product is frozen before application.
Incompatible Materials	Reducing agents, oxidizing agents.
Hazardous Decomposition Products	Product can decompose on combustion (burning) to form possibly toxic gases and vapours.
Hazardous Reactions	None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

PRODUCT MIXTURE INFORMATION

Local Effects	Mild irritant: eye, skin, inhalation and ingestion.
Target Organs	Eyes, mucous membranes, skin.

POTENTIAL HEALTH EFFECTS

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion

short term exposure	Harmful if swallowed. Acute oral poisoning: LD-50 >10,000 mg/kg (Rats).
long term exposure	No information available.

Skin contact

short term exposure	Mild irritant. Skin contact can cause redness, itching, irritation, if extended contact with concentrated product.
long term exposure	Prolonged and repeated skin contact with undiluted solutions may induce eczematoid dermatitis.

Eye contact

short term exposure	Eye contact may cause stinging, blurring, tearing, pain.
long term exposure	No information available.

Inhalation

short term exposure	Inhalation of mists or aerosols can produce mucous membrane and respiratory irritation.
long term exposure	No information available.

Carcinogen Status

NOHSC	No significant ingredient is classified as carcinogenic by NOHSC.
NTP	No significant ingredient is classified as carcinogenic by NTP.

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IARC No significant ingredient is classified as carcinogenic by IARC.
Medical conditions aggravated by exposure None known.

SECTION 12 – ECOLOGICAL INFORMATION

Fish toxicity None available for this specific product.
Algae toxicity None available for this specific product.
Invertebrates toxicity None available for this specific product.
Toxicity to Bacteria None available for this specific product.
OECD Biological degradation Individual components are inorganic and not designed to be biodegradable.
General Product miscible with water. As with any chemical product, do not discharge bulk quantities into drains, waterways, sewer or environment. Inform local authorities if this occurs.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal To dispose of quantities of undiluted product, refer to State Land Waste Management Authority. Transfer product residues to a labelled, sealed container for disposal or recovery. Waste disposal must be by an accredited contractor. As with any chemical, do not put down the drain in quantity.

SECTION 14 – TRANSPORT INFORMATION

ADG CODE – ROAD & RAIL

UN Number	none allocated	ADG Classification	none allocated
Shipping Name	none allocated	ADG Subsidiary Risk	none allocated
Hazchem Code	none allocated	Packing Group	none allocated
Packaging Method	none allocated	Special Provisions	none allocated
Segregation	none allocated		

IATA - AIR

UN Number	none allocated	Classification	none allocated
Shipping Name	none allocated	Subsidiary Risk	none allocated
Hazchem Code	none allocated	Packing Group	none allocated
Packaging Method	none allocated	Special Provisions	none allocated
Segregation	none allocated		

IMDG - SEA

UN Number	none allocated	Classification	none allocated
Shipping Name	none allocated	Subsidiary Risk	none allocated
Hazchem Code	none allocated	Packing Group	none allocated
EMS	none allocated	Special Provisions	none allocated
Segregation	none allocated		

SECTION 15 – REGULATORY INFORMATION

AICS All ingredients present on AICS.
GHS Classification Not hazardous

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SUSMP None allocated
ADG Code None allocated

SECTION 16 – OTHER INFORMATION

Acronyms

SUSMP Standard for the Uniform Scheduling of Medicines and Poisons.
ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail.
CAS Number Chemical Abstracts Service Registry Number.
UN Number United Nations Number.
HAZCHEM An emergency action code of numbers and letters which gives information to emergency services.
NOHSC National Occupational Health and Safety Commission.
NTP National Toxicology Program (USA).
IARC International Agency for Research on Cancer.
AICS Australian Inventory of Chemical Substances.
TWA Time Weighted Average
STEL Short Term Exposure Limit

Literature References

List of Designated Hazardous Substances [NOHSC:10005(1999)]
Australian Code For The Transport Of Dangerous Goods By Road And Rail – 7th Edition.
Standard for the Uniform Scheduling of Medicines and Poisons 2012.
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]
Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]
Material Safety Data Sheets – individual raw materials – Suppliers.
HSIS – Hazardous Substance Information System – National Worksafe Data Base.
Labelling of workplace hazardous chemicals, Code of Practice, DEC 2011
Guidance on the classification of hazardous chemicals under the WHS Regulations, Implementation of the Globally Harmonised System of classification and labeling of chemicals (GHS) APRIL 2012
Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Third revised edition.

Revision Information

New Issue to standard : PREPARATION OF SAFETY DATA SHEETS FOR HAZARDOUS CHEMICALS Code of Practice DECEMBER 2011

Note

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

Contact Point

Regulatory Affairs Manager. **Telephone** +61 7 5449 1110

Issue Date

July 2013 **Supersedes Issue Date** 1st issue

This SDS summarizes at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since the supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier.