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Section 1 – Identification

Product Identifier				
Product name	HAND-BAC			
Chemical name	Not Applicable			
Synonyms	Product Code: UBHANDBAC			
Proper shipping name	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)			
Chemical formula	Not Applicable			
Other means of identification	Not Available			
CAS number	Not Applicable			
Recommended use of the chemica	al and restrictions on use			
Relevant identified uses	Alcohol based hand sanitizing gel.			
Details of the manufacturer or importer				
Registered company name	ECOCLEAN UTILITY AGENCIES Pty Ltd			
Address	26 Notar Drive,Ormeau, Queensland, Australia, 4220			
Telephone	(07) 5549 3666			
Website	www.ecocleanavantichem.com.au			
Emergency phone number	Poisons Information Centre: Phone 13 11 26			
Emergency Telephone Number				
Association / Organisation	Poisons Information Centre			
Emergency telephone number	13 11 26			
Other emergency telephone	In an amazzanau talanhana 000 far fire nalisa and ambulan			
numbers	In an emergency telephone 000, for fire, police and ambulance.			

Section 2 – Hazard(s) Identification

Classification of the substance or mixture				
Poisons Schedule	Not scheduled			
ADG Code	Flammable 3			
GHS Classification	Flammable liquids Category 3			
	Eye Irritation Category 2A			
Label elements				
GHS label pictograms				



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Safety Data Sfieet					
Signal word	WARNING				
Hazard statement(s)					
H226	Flammable liquid and vapour.				
H319	Causes serious eye irritation				
Precautionary statement(s): Gene	ral				
P101	If medical advice is needed, have product container or label at hand.				
P102	Keep out of reach of children.				
P103	Read label before use.				
Precautionary statement(s): Preven	ention				
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.				
P233	Keep container tightly closed.				
P240	Ground/bund container and receiving equipment.				
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.				
P242	Use only non-sparking tools.				
P243	Take precautionary measures against static discharge.				
P264	Wash hands thoroughly.				
P280	Wear protective gloves/eye protection/face protection.				
Precautionary statement(s): Resp	onse				
P370+P378	In case of fire: Use alcohol resistant foam/water spray/fog for extinction.				
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.				
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.				
P337 + P313	If eye irritation persists: Get medical advice/attention.				
Precautionary statement(s): Stora	ge				
P403+P235	Store in well ventilated place. Keep cool.				
Precautionary statement(s): Dispo	osal				
P501	Dispose of contents/container in accordance with local regulations.				
Note					
IMPORTANT	This SDS and the Hazard Classifications contained therein, only apply to the				
	product in its concentrated form, as supplied.				
	When diluted to 1:10 or greater they no longer apply.				
	However, good hygiene and housekeeping practices should be adhered to.				

Section 3 – Composition and Information on Ingredients

Ingredient	CAS Name	Proportion
		1. oportion



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Ethanol	64-17-5	>60 %w/w		
Water	7732-18-5	30 – 60 %w/w		

Section 4 – First Aid Measures

Description of necessary first aid	measures							
Eye Contact	If this product comes in contact with eyes, rinse cautiously with water for							
	several minutes. Remove contact lenses, if present and easy to do. Continue							
	rinsing. If symptoms persist transport to nearest medical facility for additional							
	treatment.							
Skin contact	If skin contact occurs, remove contaminated clothing and wash skin							
	thoroughly with water and follow by washing with soap if available.							
Inhalation	Remove victim from exposure if safe to do so. If rapid recovery does not							
	occur, transport to nearest medical facility for additional treatment. Remove							
	contaminated clothing.							
Ingestion	If swallowed, do NOT induce vomiting. Transport to nearest medical facility							
	for additional treatment.							
Symptoms caused by exposure								
Inhalation:	Health injuries are not known or expected under normal use.							
Skin:	Health injuries are not known or expected under normal use.							
Eye:	May include burning sensation, redness, swelling and/or blurred vision.							
Ingestion:	Can cause drunkenness or harmful central nervous system effects. The deliberate ingestion of ethanol (50-100ml) may cause inebriation such that safety is impaired. Effects of a small intake may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, and fatigue. Ingestion of a large amount may lead to severe acute intoxication, tremors, convulsion, loss of consciousness, coma, respiratory arrest and death.							
Medical attention and special trea	atment							
	Treat symptomatically							

Section 5 – Fire Fighting Measures

Suitable extinguishing equipment / media					
Alcohol stable foam, water spray or fog. Dry chemical powder, carbon dioxide for small fires only. Do not use water in a jet.					
Special hazards arising from the chemical					
Fire incompatibility Carbon monoxide and/or carbon dioxide may be evolved.					



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Special protective equipment and precautions for fire fighters						
Fire Fighting	 Wear full protective clothing and self-contained breathing apparatus. Hazchem code •2Y Prevent, by any means available, spillage form entering drains or watercourse. Consider evacuation (or protect in place). Fight Fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. 					
Fire/Explosion Hazard	 Liquid and vapour are flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. Combustion products include carbon dioxide (CO₂), other pyrolysis products typical of burning organic material. 					

Section 6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures				
Minor spills	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely. 			
Major spills	 Clear area of personal and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage form entering drains or watercourse. Consider evacuation (or protect in place) No smoking, naked lights or ignition sources. For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely. 			



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Environmental precautions					
	 Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Ventilate contaminated area thoroughly. 				
Methods and materials for contain	nment and cleaning up				
	 Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment. Personal protective equipment advice is contained in Section 8 of the SDS. 				

Section 7 – Handling and Storage

Precautions for safe handling						
Safe handling Other information	 Wear prescribed protective clothing. Use in well ventilated area. Do NOT eat, drink or smoke when handling. Wash hands after use. Keep containers closed tightly when not in use. Store in accordance to manufacturers instructions. Store in original containers. Store in a cool, dry, well ventilated area out of direct sunlight. Store in flammable approved cupboards or storage containers. 					
Conditions for safe storage, includi	ng any incompatibilities					
Suitable container	Bulk storage tanks should be bunded.Store in original containers provided by the manufacturer.					
Storage incompatibility	 Store in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants. 					

Section 8 – Exposure controls and personal protection

Control parameters



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Occupationa	•	mits OEL)	See Ingredients Data and Emergency Limits below.					
Ingredients data	a							
Source	Ingredient	''	laterial ame	TWA	STEL	Pea	ak	Notes
Australian Exposure Standards	ethanol	E			Not availa	ble Not	ot available	Not available
Emergency limi	ts							
Ingredient	TEEL	-0		TEEL-1	TEEL-2	L-2 TEEL		3
Ethanol	1000	ppm		3000ppm	3300pp	m	3300p	opm
IDLH data								
Ingredient			Origina	I IDLH		Revised II	IDLH	
Ethanol			15,000	ppm		3,300 ppr	om	
Exposure contro	ols							
engine	Appropriate engineering controls • Ensure adequate ventilation to keep airborne concentrations below exposure standards.					exposure		
		 The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. The following protective equipment should be available. 						
Eye and protec	ction	 Generally not required to handle the product as a hand sanitizer gel as per label directions. The use of safety glasses with side shield protection, goggles or face shield is recommended to handle concentrate in quantity, cleaning up spills, decanting, etc. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. 						
Skin protec	ction	See hand protection below						
Hand protec	Lion	 Not required to handle the product as per label directions. Overalls, apron, work boots and elbow length gloves are recommended to handle in quantity, cleaning up spills, decanting, etc. (as per AS/NZS 2161, or as 						



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	recommended by supplier).
Body protection	Normal work clothes and boots
Respiratory protection	 No personal respiratory protective equipment normally required. If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Other protection	Ensure there is access to eye wash.
Thermal hazards	Not Available

Section 9 – Physical and Chemical Properties

Information on basic phys	ical and chemical properties		
Appearance	Colourless non-viscous liquid	with a characteristic odour.	
Physical state	Liquid gel	Relative density (water=1)	0.99 @ 25 °C
Odour	Alcohol & lemon	Partition coefficient n- octanol/water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	392°C
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting Point / Freezing Point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	78°C	Molecular weight (g/mol)	Not Available
Flash point (°C)	24 °C closed cup	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	19% (for ethanol)	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	3.5% (for ethanol)	Volatile Component (%vol)	99
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air=1)	1.59 @ 15°C (for ethanol)	VOC g/L	Not Available

Section 10 - Stability and Reactivity



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Reactivity	Stable under normal conditions of use.
Chemical stability	Stable under normal conditions of use.
Possibility of hazardous Stable under normal conditions of use.	
reactions	
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Incompatible materials Strong oxidising agents.	
Hazardous decomposition Burning can produce carbon monoxide and/or carbon dioxide.	
products	

Section 11 – Toxicological Information

Information on toxicological effects				
Inhaled	Health injuries are not known or expected under normal use.			
Ingestion	Can cause drunkenness or harmful central nervous system effects. The deliberate ingestion of ethanol (50-100ml) may cause inebriation such that safety is impaired. Effects of a small intake may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, and fatigue. Ingestion of a large amount may lead to severe acute intoxication, tremors, convulsion, loss of consciousness, coma, respiratory arrest and death.			
Skin contact	Not expected to be irritating to skin.			
Eyes	May include burning sensation, redness, swelling and/or blurred vision. Discomfort may last up to 2 days but healing is usually spontaneous and complete.			
Chronic	Health injuries are not known or expected under normal use.			
HAND-BAC SANITIZER GEL (as	sold)			
Acute Toxicity	Not toxic, based on ingredients. Oral LD50 (calculated): > 20,000 mg/kg		Causes eye irritation, based on ingredients.	
Individual constituents				
Ethanol				
Acute Toxicity	Low toxicity in animals - LD50 Oral (rat): 7060mg/kg LC50 Inhalation (rat, 6h): 5900mg/m³	Carcinogenicity	Not listed as a carcinogen NTP, IARC, OSHA, EPA.	
Skin Irritation/Corrosion		Reproductivity	Not expected to impair fertility.	
Serious Eye Damage/Irritation	Vapours may irritate the eyes. Liquid or mists may severely irritate or damage the eyes.	STOT – Single Exposure	No data available	



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Respiratory or Skin sensitivity	No data available	STOT – Repeated	No data available
		Exposure	
Mutagencity	No data available	Aspiration Hazard	Yes

Section 12 – Ecological Information

Toxicity	
	Expected to be harmful. Ethanol biodegrades in soil rapidly. If a large quantity is in contact with soil it may leach into the ground water, however most is lost by evaporation. Ethanol is biodegradable and does not bio-accumulate to an appreciable extent.

Aqua-Toxicity					
HAND-BAC	Acute Aquatic Toxicity (Calculated) LC50: > 450 mg/L.				
(as sold)	Acute Aquatic Toxicity NOT HAZARDOUS .				
	Not harmful to aquatic life. LC50 > 100mg/L.				
Individual Constituents:					
Ethanol	Ethanol biodegrades in soil rapidly. If a large	quantity is in contact with soil it may			
	leach into the ground water, however most is	s lost by evaporation. Ethanol is			
	biodegradable and does not bio-accumulate	to an appreciable extent.			
	Bluegill Sunfish LC50/96hr: >13500mg/L				
	Rainbow Trout LC50/24hr : 11200mg/L (Flow	through)			
	Golden Ide LCO/48hr : >1000mg/L				
	Daphnia Magna EC50/24hr : >1000mg/L				
Persistence and degradability					
Ingredient	Persistence: Water/Soil	Persistance: Air			
Ethanol	Biodegradable.	Not Available			
Bioaccumulative potential	Bioaccumulative potential				
Ingredient	Bioaccumulation				
Not Available	Not Available				
Mobility in soil					
Ingredient	Mobility				
Ethanol	Does not bio-accumulate to an appreciable extent.				



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Section 13 – Disposal considerations

Waste treatment methods	
Product and Packaging	Recycle containers if possible, or dispose in an authorised landfill. Ensure waste
Disposal	disposal confirms to local waste disposal regulations.

Section 14 – Transport Information

Labels Required			
Transport pictogram	FLAMMABLE LIGHTO 3		
Marine Pollutant	No		
HAZCHEM	•2Y		
Land Transport (ADG)			
UN number	1170		
Packing group	III		
HAZCHEM	•2Y		
UN proper shipping name	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION)		
Environmental hazard class(es)	No relevant data		
Transport hazard class(es)	Class Subrisk	3	
Special precautions for user	Special provisions Limited quantity	144 1L	
Air transport (ICAO-IATA / DGR)			
UN number	1170		
Packing group	III		
UN proper shipping name	ETHANOL (ETHYL ALCOHOL	L) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	
Environmental hazard	No relevant data		
Transport hazard class(es)	ICAO/IATA Class ICAO/IATA Subrisk ERG Code	3 3L	
Special precautions for user	Special provisions	A3A58A180	
Special precautions for user	Cargo Only Packaging Instructions	364	
	Cargo Only Maximum	60L	



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Qty/Pack	
Passenger and Cargo	353
Packing Instructions	
Passenger and Cargo	5L
Maximum Qty/Pack	
Passenger and Cargo	Y341
Limited Quantity	
Packaging Instructions	
Passenger and Cargo	1L
Limited Maximum	
Qty/Pack	

Sea transport (IMDG-Code / GGVSee)

UN number	1170			
Packing group	111			
UN proper shipping name	ETHANOL (ETHYL ALCOHOL) or			
	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)			
Environmental hazard class(es)	Not Available			
Transport hazard class(es)	IMDG Class 3			
	IMDG Subrisk			
Special precautions for user	EMS Number F-E, S-D			
	Special provisions 144			
	Limited Quantities	1L		

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code				
Source	Ingredient	Pollution Category	Residual Concentration – outside special Area (%w/w)	Residual Concentration
40-7-4-9-0-0-MK- 20041022	Ethanol	Not Available	Not Available	Not Available

Section 15 – Regulatory Information

Health, safety and environment regulations		
Poisons Schedule	Not scheduled	

Section 16 – Other Information

Issue Date	26 th August 2016	
Version Number	2.0	



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Jaiety Data Silect		
Abbreviations and acronyms	 ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail. AICS: Australian Inventory of Chemical Substances. CAS Number: Chemical Abstracts Service Registry Number. GHS: Globally Harmonized System of Classification and Labelling of Chemicals HAZCHEM: An emergency action code of numbers and letters which gives information to emergency services. HSIS: Hazardous Substances Information System IARC: International Agency for Research on Cancer. NOHSC: National Occupational Health and Safety Commission. NTP: National Toxicology Program (USA). SDS: Safety Data Sheet STEL: Short Term Exposure Limit. SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons. TWA: Time Weighted Average. 	
Literature references	 UN Number: United Nations Number. Preparation of Safety Data Sheets for Hazardous Chemicals – Code of Practice (Safe Work Australia) GHS Hazardous Chemical Information List (Safe Work Australia) Guidance on the Classification of Hazardous Chemicals under the WHS Regulations. Safe Work Australia. Global Harmonized System of Classification and Labelling of Chemicals "Australian Exposure Standards" Australian Code For The Transport Of Dangerous Goods By Road And Rail Standard for the Uniform Scheduling of Medicines and Poisons Material Safety Data Sheets – individual raw materials – Suppliers. Approved Criteria for Classifying Hazardous Substances NOHSC:1008(1999)] Hazardous Substance Information System – National Worksafe Data Base. IMPLEMENTATION OF THE GLOBALLY HARMONISED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) APRIL 2012 	
Risk assessments	This SDS is a tool to communicate hazards which can assist you in creating relevant risk assessments for your workplace. There are many variables in determining whether a particular hazard is a risk in your workplace. Keep in mind this may be influenced by such things as the amount used, frequency of use, engineering controls, effectiveness of safety training and many more considerations.	
Disclaimer	Safety Data Sheets are updated frequently. Please ensure that you have a current copy. This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be	



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	made, the user should contact XO2 Pty Ltd. Our responsibility for products sold are subject to our standard terms and conditions. Where health or safety data given discloses a risk to the user or environment, it is the responsibility of the Purchaser to pass on that information to employees or those who may be using the product, ensuring that adequate safety procedures are used including good industrial hygiene.	
Copyright	This document is copyright.	
End of SDS		

Document Revision History				
Revision Version #	Date	Reason for revision		
Draft		GHS format		
2.0	26/08/2016	Review by Tuwai Specialties. <u>tuwai.wt@bigpond.com</u>		