Enviro Hand Sanitizer

(Not hazardous according to criteria of Worksafe Australia)

New Liquid Formula to be used through Dispensers.

Enviro Hand Sanitizer is a waterless, alcohol based hand-rub that uses natural Oil to replenish the skin. Human skin lipids contain approximately 22% of cishexadec-6-enoic acid which along with palmitic acid comprise around half the skin lipid content. It’s action is thought to be a combination of lubrication, softening and protection of the protein structures and prevention of moisture loss from the skin.

Natural Oil contains up to 22% of an isomer, palmitoleic acid which is the highest known actual concentration of this unique material.

Enviro Hand Sanitizer uses Natural Oils to replace the skin’s lipids which are removed by alcohol leaving your hands hygienic, soft and replenished.

DIRECTIONS:

- Apply to hands, cover all skin surfaces and allow to dry.
- Water not required.

You don’t have to settle for second best to save money when cleaning.
Step-up to the new level in Cleaning Soaps & Detergents.

Use Enviro Chemicals and you will never settle for second best again.

We trust this product will be of interest to you and for more info visit our Web site. Please do not hesitate to contact us if we can be of further assistance.
Section 1 - Identification of the Material and Supplier

Chemical nature: Ethanol solution.
Trade Name: Enviro Hand Sanitizer
Product Code: EC-19ALCL
Product Use: Instant hand sanitiser.
Creation Date: December, 2016
This version issued: This SDS issued December, 2016 shall remain valid for 5 years unless a new SDS is issued in the meantime. Please contact Enviro Chemicals P/L to ensure you have the latest version of this product’s SDS.

Poisons Information Centre: Phone 13 1126 from anywhere in Australia

SUPPLIER DETAILS
Company: Enviro Chemicals Pty. Ltd.
Address: 744 – 744 Woodville Road, Fairfield East, NSW 2165 AUSTRALIA
Telephone: 02 9755 2012 Facsimile: 02 9726 1457
Web: www.envirochemicals.com.au
Email: info@envirochemicals.com.au
Enviro Chemicals SDS are available from this website.

Section 2 - Hazards Identification

Statement of Hazardous Nature
This product is classified as: Xi, Irritating. F, Flammable. Hazardous according to the criteria of SWA. Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

SUSMP Classification: None allocated.
ADG Classification: Class 3: Flammable liquids.
UN Number: 1170, ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

GHS Signal word: WARNING
Flammable liquids Category 3
Eye irritation Category 2A

HAZARD STATEMENT:
H226: Flammable liquid and vapour.
H319: Causes serious eye irritation.

PREVENTION
P102: Keep out of reach of children.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P233: Keep container tightly closed.
P281: Use personal protective equipment as required.

RESPONSE
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray can be used.

STORAGE
P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL
P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

**Emergency Overview**

**Physical Description & Colour**: Clear thickened liquid.

**Odour**: Characteristic alcohol and perfume odour.

**Major Health Hazards**: Eye irritant.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc,%</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>60</td>
<td>1880</td>
<td>not set</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td>secret</td>
<td>&lt;3</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>to 100</td>
<td>not set</td>
<td>not set</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the 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 may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated 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**

**General Information**: You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

**Inhalation**: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact**: Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact**: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Ingestion**: If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

**Section 5 - Fire Fighting Measures**

**Fire and Explosion Hazards**: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Any explosion will likely spread the fire to surrounding materials. Water spray may be used to cool drums involved in a fire, reducing the chances of an explosion.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media**: Try to contain spills, minimise spillage entering drains or water courses.

**Fire Fighting**: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

**Flash point**: About 23°C

**Upper Flammability Limit**: 19%

**Lower Flammability Limit**: 3.5%

**Autoignition temperature**: No data.

**Flammability Class**: Flammable Category 3 (GHS); Flammable (AS1940)

**Section 6 - Accidental Release Measures**

**Accidental release**: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable
materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Avoid using sawdust or other combustible material. Any electrical equipment should be non-sparking. Any equipment capable of building an electrostatic charge should be electrically grounded. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

### Section 7 - Handling and Storage

**Handling**: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage**: Store in a cool, well ventilated area, and make sure that surrounding electrical devices and switches are suitable. Check containers periodically for leaks. Containers should be kept closed in order to minimise contamination and possible evaporation. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. If you keep more than 10000kg or L of Dangerous Goods of Packaging Group III, you may be required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

### Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:


<table>
<thead>
<tr>
<th>ETHANOL</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>1880</td>
<td>not set</td>
</tr>
</tbody>
</table>

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation**: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

**Eye Protection**: Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

**Skin Protection**: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

**Protective Material Types**: There is no specific recommendation for any particular protective material type.

**Respirator**: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Eyebaths or eyewash stations should, if practical, be provided near to where this product is being handled commercially.

### Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical Description &amp; Colour</th>
<th>Clear light blue liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Characteristic alcohol odour.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>About 78°C at 100kPa</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>No specific data. Liquid at normal temperatures.</td>
</tr>
<tr>
<td>Volatiles</td>
<td>99%</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>5.80 kPa at 20°C</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>1.59</td>
</tr>
</tbody>
</table>
Specific Gravity: 1.8-1.9
Water Solubility: Completely soluble.
P: 5.0-6.0 (as supplied)
Volatility: No data.
Odour Threshold: No data.
Evaporation Rate: No data.
Coeff Oil/water Distribution: No data.
Autoignition temp: No data.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Keep away from sources of sparks or ignition. Handle and open containers carefully. Any electrical equipment in the area of this product should be flame proofed.
Incompatibilities: oxidising agents.
Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.
Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Information on toxicological effects:

<table>
<thead>
<tr>
<th>Acutetoxicity</th>
<th>No known significant effects or hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skincorrosion/irritation</td>
<td>No known significant effects or hazards.</td>
</tr>
<tr>
<td>Serious eyedamage/irritation</td>
<td>Serious eye irritation</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>No known significant effects or hazards.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No known significant effects or hazards.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No known significant effects or hazards.</td>
</tr>
<tr>
<td>Reproductivetoxicity</td>
<td>No known significant effects or hazards.</td>
</tr>
<tr>
<td>Specific target organ toxicity (STOT) single exposure</td>
<td>No known significant effects or hazards.</td>
</tr>
<tr>
<td>Specific target organ toxicity (STOT)-repeated exposure</td>
<td>No known significant effects or hazards.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>No known significant effects or hazards.</td>
</tr>
</tbody>
</table>

Ethanol

Classification of Hazardous Ingredients

Health effects:
Serious eye irritation. Flammable liquid and vapour.

Potential Health Effects

Inhalation:
Short Term Exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.
Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:
Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. In addition product is unlikely to cause any discomfort in normal use.
Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:
**Short Term Exposure**: This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

**Long Term Exposure**: No data for health effects associated with long term eye exposure.

**Ingestion**: 

**Short Term Exposure**: Significant oral exposure is considered to be unlikely. However, this product may be mildly irritating to mucous membranes but is unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure**: No data for health effects associated with long term ingestion.

**Carcinogen Status**:

**SWA**: No significant ingredient is classified as carcinogenic by SWA.

**NTP**: No significant ingredient is classified as carcinogenic by NTP.

**IARC**: Ethanol is classed 1 by IARC - carcinogenic to humans.

See the IARC website for further details. A web address has not been provided as addresses frequently change.

### Section 12 - Ecological Information

This product is biodegradable. It will not accumulate in the soil or water or cause long term problems. Expected to not be an environmental hazard.

**Fish**: LC₅₀ fathead minnow (Pimephales promelas): 13480mg/L  
**Algae**: Toxicity threshold 7-8 days Blue-Green Algae LOEC 1450mg/L  
**Daphnia**: EC₅₀ 5680mg/L

**Persistence and degradability**: This product readily biodegrades on exposure to light and air.  
**Mobility**: This product is mobile on dilution, risking contamination of waterways, grasslands and soils.

### Section 13 - Disposal Considerations

**Disposal**: This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. If neither of these options is suitable in-house, consider controlled incineration, or contact a specialist waste disposal company.

### Section 14 - Transport Information

**Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.**

**UN Number**: 1170, ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**Hazchem Code**: +2Y  
**Special Provisions**: 144, 223  
**Limited quantities**: ADG 7 specifies a Limited Quantity value of 5 L for this class of product.  
**Dangerous Goods Class**: Class 3: Flammable liquids.

**Packing Group**: III  
**Packing Instruction**: P001, IBC03, LP01

Class 3 Flammable Liquids shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 2.1 (Flammable Gases where flammable liquids and flammable gases are both in bulk), 2.3 (Toxic Gases), 4.2 (Spontaneously Combustible Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances, except Flammable Liquid is nitromethane), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases except where the Flammable Liquids and Flammable Gases are in bulk), 2.2 (Non-Flammable Non-Toxic Gases), 4.1 (Flammable Solids), 4.3 (Dangerous When Wet Substances), 6 (Toxic Substances, where Flammable Liquid is nitromethane), 8 (Corrosive Substances), 9 (Miscellaneous Dangerous Goods), Foodstuffs or foodstuff empties.

### Section 15 - Regulatory Information

**AICS**: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

### Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.
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. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO PROVIDE ADDITIONAL INFORMATION.

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (December 2011) and is Copyright ©.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;</td>
<td>less than</td>
</tr>
<tr>
<td>&gt;</td>
<td>greater than</td>
</tr>
<tr>
<td>ADICODE</td>
<td>Australian Code for the Transport of a Dangerous Goods by Road and Rail (7th edition)</td>
</tr>
<tr>
<td>AICS</td>
<td>Australian Inventory of Chemical Substances</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (Registry Number)</td>
</tr>
<tr>
<td>COD</td>
<td>Chemical Oxygen Demand</td>
</tr>
<tr>
<td>degC</td>
<td>Degree Celsius</td>
</tr>
<tr>
<td>g</td>
<td>gram</td>
</tr>
<tr>
<td>g/L</td>
<td>grams per litre</td>
</tr>
<tr>
<td>Hazchem Code</td>
<td>Emergency action code of numbers and letters that provide information to emergency services especially firefighters</td>
</tr>
<tr>
<td>HSIS</td>
<td>Hazardous Substance Information System</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>kg</td>
<td>kilogram</td>
</tr>
<tr>
<td>L</td>
<td>Litre</td>
</tr>
<tr>
<td>LC50</td>
<td>The concentration of a material (inhaled) that will be lethal to 50% of the test animals.</td>
</tr>
<tr>
<td>LD50</td>
<td>The dose (swallowed) that will be lethal to 50% of the test animals.</td>
</tr>
<tr>
<td>m3</td>
<td>Cubic metre</td>
</tr>
<tr>
<td>mg</td>
<td>milligram</td>
</tr>
<tr>
<td>mg/m3</td>
<td>milligrams per cubic metre</td>
</tr>
<tr>
<td>miscible</td>
<td>A liquid that mixes homogeneously with another liquid</td>
</tr>
<tr>
<td>N/A</td>
<td>Not applicable</td>
</tr>
<tr>
<td>N/K</td>
<td>Not known</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>non-haz</td>
<td>Non-hazardous</td>
</tr>
<tr>
<td>NOS</td>
<td>Not otherwise specified</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program (USA)</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>ppb</td>
<td>Parts per billion</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>R-Phrase</td>
<td>Risk Phrase</td>
</tr>
<tr>
<td>STEL</td>
<td>Short term exposure limit</td>
</tr>
<tr>
<td>SUSMP</td>
<td>Standard for the Uniform Scheduling of Medicines &amp; Poisons</td>
</tr>
<tr>
<td>SWA</td>
<td>Safe Work Australia, formerly ASCC and NOHSC</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>UN Number</td>
<td>United Nations (Number)</td>
</tr>
<tr>
<td>wt</td>
<td>weight</td>
</tr>
</tbody>
</table>
Abbreviations and Definitions of terms used:

The information in this Data Sheet is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. As far as lawfully possible, Enviro Chemicals accepts no liability for any loss, injury or damage (including consequential loss) suffered or incurred by any person as a consequence of reliance on the information and advice contained herein.

End of SDS.