

**Section 1 - Identification of Chemical Product and Company**

Cardserv  
Unit 1/18 Salisbury Road  
Hornsby  
NSW 2077, AUSTRALIA

Phone: +61 2 9482 5222

Fax +61 2 9482 5233

**Substance:** Aliphatic alcohol  
**Trade Name:** **Isopropanol Solution**  
**Other Names:** Propan-2-ol; Isopropyl alcohol; IPA

**Note:** This MSDS is intended for a number of products presented by this company as sprays, sachets or in bottles or drums. They are all based on Isopropanol, and have almost identical hazard properties.

**Product Code:** used in CardServ products

7750 0019C IPA cleaning Pads paper substrate  
7750 0019A IPA cleaning Pads no woven polyester substrate  
7750 0050 IPA Cheque Swipe Cleaners (dry with 45mls IPA)  
7750 0050S Cheque Swipe Readers (pre-saturated sachets)  
7750 0252 0.76 Presat Cleaning Cards  
7750 0253 0.84 Presat Cleaning Cards  
7750 0255 0.92 Presat Cleaning Cards

**Product Use:** Solvent  
**Creation Date:** **June, 2010**  
**Revision Date:** **May, 2011**

**Section 2 - Hazards Identification****Statement of Hazardous Nature**

This product is classified as: Xi, Irritating. F+, Highly Flammable. Hazardous according to the criteria of ASCC. Dangerous according to the Australian Dangerous Goods (ADG) Code.

**Risk Phrases:** R11, R36. Highly flammable. Irritating to eyes.

**Safety Phrases:** S7, S16, S26, S24/25. Keep container tightly closed. Keep away from sources of ignition - No smoking. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. Avoid contact with skin and eyes.

**SUSDP Classification:** None allocated.

**ADG Classification:** Class 3 (ISOPROPANOL)

**UN Number:** 1219

**Emergency Overview**

**Physical Description & Colour:** Colourless liquid

**Odour:** Alcohol odour

**Major Health Hazards:** No major health hazards. Eye irritant.

**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. However product may be irritating, but is unlikely to cause anything more than mild transient discomfort.

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

**MATERIAL SAFETY DATA SHEET**

**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. This product, while believed to be not harmful, is likely to cause headache and gastric disturbance such as nausea and vomiting if ingested in significant quantities. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

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

**Carcinogen Status:**

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

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

**IARC:** Isopropanol is Class 3 - unclassifiable as to carcinogenicity to humans.

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

### Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Isopropanol	67-63-0	>95	983	1230
Other non hazardous ingredients		to 100	not set	not set

May include small quantities of materials due to manufacturing or reaction processes.

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

The ASCC 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 MSDS 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:** Gently blot away excess liquid. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

**Eye Contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 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:** This product is classified as flammable. 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:** Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires. Ensure that no spillage enters drains or water courses.

**Fire Fighting:** When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.

## MATERIAL SAFETY DATA SHEET

<b>Flash point:</b>	12°C (Closed cup)
<b>Upper Flammability Limit:</b>	12.7%
<b>Lower Flammability Limit:</b>	2.0%
<b>Autoignition temperature:</b>	460°C
<b>Flammability Class:</b>	Flammable

## 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 Viton, Nitrile, butyl rubber, PE/EVAL, Responder. 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. It should be fitted with a type A cartridge, suitable for organic vapours.

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 MSDS 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 2500kg or L of Dangerous Goods of Packaging Group II, 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:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

<b>ASCC Exposure Limits</b>	<b>TWA (mg/m<sup>3</sup>)</b>	<b>STEL (mg/m<sup>3</sup>)</b>
Isopropanol	983	1230

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:** This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan.

**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:** You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product. See below for suitable material types.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: Viton, nitrile, butyl rubber.

**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 be provided near to where this product is being used.

## MATERIAL SAFETY DATA SHEET

## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Colourless liquid
<b>Odour:</b>	Pleasant alcohol odour, bitter taste
<b>Boiling Point:</b>	82°C at 100kPa
<b>Freezing/Melting Point:</b>	-88°C
<b>Volatiles:</b>	Completely volatile at 100°C.
<b>Vapour Pressure:</b>	4.35 kPa at 20°C
<b>Vapour Density:</b>	2.1
<b>Specific Gravity:</b>	0.785
<b>Water Solubility:</b>	Completely soluble.
<b>pH:</b>	No data.
<b>Volatility:</b>	No data
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	1.4
<b>Coeff Oil/water Distribution:</b>	No data
<b>Viscosity:</b>	2.65 cSt at 25°C
<b>Autoignition temp:</b>	460°C

## 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 heat, flames and sparks. 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:** Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. 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

**Toxicity:** IMMEDIATE (ACUTE) EFFECTS:

Oral LD<sub>50</sub> (rat): 5045 mg/kg

Inhalation LC<sub>50</sub> (rat): 16,000 ppm/8 hours

Skin LD<sub>50</sub> (rabbit): 12,800 mg/kg

Skin Irritation (rabbit): 500 mg - mild

Eye Irritation (rabbit): 10 mg - moderate: 100 mg - severe

DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:

Subchronic Inhalation (rat): TCLo 5000 ppm/6 hr/day for 90 days (intermittent) caused a change in motor activity.

Chronic Inhalation (rat): TCLo 2500 ppm/6 hr/day for 2 years (intermittent) caused changes in liver and bladder weight and changes in urine composition.

OTHER DATA: Some very rare cases of skin hypersensitivity to Isopropanol have been reported. However, these cases do not at this time warrant Isopropanol to be classed as a sensitiser.

## Section 12 - Ecological Information

This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

Biodegradation: 58% theoretical BOD, 5 days at 20° C - Relatively biodegradable.

Bioconcentration: Not expected to bioaccumulate in aquatic organisms based on low octanol/water partition coefficient.

Acute Toxicity (fathead minnow): LC<sub>50</sub> 10.4 g/L /96 hr.

## Section 13 - Disposal Considerations

**Disposal:** There are many pieces of legislation covering waste disposal and they differ in each state and territory, so each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. The Hierarchy of Controls seems to be common - the user should investigate: Reduce, Reuse, and Recycle and only if all else fails

## MATERIAL SAFETY DATA SHEET

should disposal be considered. Note that properties of a product may change in use, so that the following suggestions may not always be appropriate. The following may help you in properly addressing this matter for this product. 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, consider controlled incineration, or landfill.

## Section 14 - Transport Information

**ADG Code:** 1219, ISOPROPANOL

**Hazchem Code:** 2[Y]E

**Special Provisions:** No special provisions specified.

**Dangerous Goods Class:** Class 3, Dangerous Goods Class

**Packaging Group:** II

**Packaging Method:** 3.8.3, RT1

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

## Section 15 - Regulatory Information

**AICS:** This product is compliant with NICNAS regulations.

## Section 16 - Other Information

**This MSDS contains only safety-related information. For other data see product literature.**

### Acronyms:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>ASCC</b>	Office of the Australian Safety and Compensation Council
<b>CAS Number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>UN Number</b>	United Nations Number

THIS MSDS 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 MSDS 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 OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. 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 MSDS is prepared in accord with the ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]

Copyright © Kilford & Kilford Pty Ltd, May, 2011.

<http://www.kilford.com.au/> Phone (02)9251 4532

## MATERIAL SAFETY DATA SHEET