

# SAFETY DATA SHEET

**LI-700™**

Date of Issue: 1 February 2023

## 1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s):	Blend of Propionic Acid, processed Lecithin and surfactant.
Recommended use:	Surfactant
Supplier:	UPL New Zealand Limited PO Box 51584, Pakuranga Auckland Phone 0800 100 325 <a href="http://www.upl-ltd.com/nz">www.upl-ltd.com/nz</a>
Emergency telephone number:	0800 CHEM CALL (0800 243 622) 24 Hours



## 2. HAZARDS IDENTIFICATION

Hazard Classification:	SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
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Required identification Details:	<b>Signal Word: DANGER</b> Keep out of reach of Children. Read label before use.
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Causes severe skin burns and eye damage.  
May cause respiratory irritation.

Prevention:	Wear protective gloves, protective clothing and eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.
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Response:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.
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IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor.

**Storage:**

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Propionic Acid	79-09-4	30 - 35
Propriety mixture		65 - 70

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

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### 4. FIRST-AID MEASURES

#### Description of necessary first aid measures:

##### First-aid measures

##### **Inhalation:**

If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Get medical attention immediately.

Call a poison center or physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

##### **Ingestion:**

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

##### **Skin contact:**

**CORROSIVE.** Causes severe burns. Immediately begin rinsing the affected areas with water. Remove contaminated clothing and shoes. Affected areas should be rinsed for a minimum 30 minutes, longer irrigation time is preferred if possible, due to the chemical reactions that occur. Luke-warm water is recommended for continued irrigation to prevent hypothermia.

Conscious persons without breathing difficulties may benefit from prolonged irrigation in a fixed shower or bathing facility prior to hospital transport. Call an ambulance for transport to hospital. Continue skin irrigation during transport. For additional advice call

the medical emergency number on this safety data sheet or your poison center or doctor. Clean shoes thoroughly before reuse. Wash clothing before reuse.

**Eye contact:**

CORROSIVE. Begin eye irrigation immediately. All eye exposures require medical evaluation following decontamination. Immediately rinse eyes with large quantities of water or saline for a minimum 30 minutes, longer irrigation time is preferred if possible, due to the chemical reaction that occurs - see Notes to Physician below. If possible, remove contact lenses being careful not to cause additional eye damage.

If the initial water supply is insufficient, keep the affected area wet with a moist cloth and transfer the person to the nearest place where rinsing can be continued for the recommended length of time. Call an ambulance for transport to hospital. Continue eye irrigation during transport. For additional advice call the medical emergency number on this safety data sheet or your poison centre or doctor.

**Most important symptoms/effects, acute and delayed**

Potential acute health effects

**Eye contact:**

Causes serious eye damage.

**Inhalation:**

May cause respiratory irritation.

**Ingestion:**

Irritating to mouth, throat and stomach.

**Skin contact:**

Causes severe burns

Over-exposure signs/symptoms

**Eye contact**

Adverse symptoms may include the following:

Pain, watering, redness.

**Inhalation**

Adverse symptoms may include the following:

Respiratory tract irritation, coughing

**Skin contact**

Adverse symptoms may include the following:

Pain or irritation, redness, blistering may occur

**Ingestion**

Adverse symptoms may include the following:

Throat and stomach pain

Indication of immediate medical attention and special treatment needed, if necessary:

**Notes to a physician:**

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments:**

Improved outcome requires prolonged rinsing or soaking with water in order to extract corrosive ions that have penetrated through the stratum corneum. Expert opinion indicates an extended duration of rinsing is required to remove corrosive chemicals - 60 minutes for strong alkalis, and 30 minutes for other corrosive substances.

Water should be maintained at a comfortable temperature. It may be necessary to delay transport to emergency care facilities in order to ensure 30 or 60 minutes of rinsing time.

However, transporting the patient may be necessary depending on the condition of the patient or the availability of a water supply. If transport is necessary, rinsing the affected area should continue, if possible, during transport.

**Protection for first-aiders:**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

Decontamination measures may be necessary. Personnel and equipment must be checked and decontaminated prior to leaving the area.

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## 5. FIRE-FIGHTING MEASURES

<b>HAZCHEM Code:</b>	2X
<b>Extinguishing media:</b>	Use dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray (fog). Use an extinguishing agent suitable for the surrounding fire. DO NOT use water jet.
<b>Hazardous thermal (de)composition products:</b>	Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, phosphorus oxides
<b>Specific hazards arising from the chemical:</b>	In a fire or if heated, a pressure increase will occur and the container may burst. May burn when exposed to flame or high temperature.
<b>Special protective actions for fire-fighters:</b>	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contain and collect the water used to fight the fire for later treatment and disposal.
<b>Special protective equipment for fire-fighters:</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel:</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders:</b>	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
<b>Environmental precautions:</b>	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused adverse impacts (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

<b>Small spill:</b>	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
<b>Large spill:</b>	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Protective measures:</b>	Read label before use. Apply this product only as specified on the label. Do not handle until all safety precautions have been read and understood. Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
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<b>Advice on general occupational hygiene:</b>	Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Conditions for safe storage, including any Incompatibilities:</b>	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Store in accordance with local regulations. Store in original container Protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Appropriate engineering controls:</b>	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Ensure any process release discharges in a controlled manner to an approved safe location.
<b>Environmental exposure controls:</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
<b><u>Personal Protective Measures</u></b>	
<b>Detail specifications for equipment:</b>	Contact your personal protective equipment manufacturer to verify the compatibility of the equipment for the intended purpose.
<b>Hygiene measures:</b>	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Eye/face protection:</b>	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
<b>Hand protection:</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

<b>Body protection:</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Other skin protection:</b>	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection:</b>	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State: Colour, Odour.</b>	Dark brown, pungent liquid.
<b>pH:</b>	3.6 (1% solution)
<b>Vapour Pressure:</b>	Not available
<b>Boiling Point:</b>	Not available
<b>Flash Point:</b>	Closed cup: >100°C (>212°F) [Tagliabue]
<b>Freezing/melting point:</b>	Not available
<b>Solubility:</b>	Soluble in water in any proportion.
<b>Density:</b>	1.03 to 1.04 g/cm <sup>3</sup>
<b>Information for flammable material:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Octanol/water partition coefficient:</b>	Not applicable
<b>Explosive Properties:</b>	Not explosive
<b>Oxidation Properties:</b>	Not an oxidizer

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Stability:</b>	The product is stable.
<b>Conditions to avoid:</b>	Keep away from incompatible materials. Keep away from heat.
<b>Materials to avoid:</b>	Strong oxidizing materials, strong alkalis, strong acids.
<b>Hazardous Decomposition Products:</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>Hazardous polymerization:</b>	
<b>Hazardous reactions:</b>	Under normal conditions of storage and use, hazardous reactions will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Propionic acid:

<b>Acute toxicity – Inhalation:</b>	Inhalation vapour: LC <sub>50</sub> >19.7 mg/l (rat) 1 hr Oral: LD <sub>50</sub> 2600 mg/kg (rat)
<b>Irritation/Corrosion:</b>	Eyes – severe irritant (rabbit) 990 ug Skin – severe irritant (rabbit) 495 mg

### Surfactant:

<b>Acute toxicity – Oral:</b>	LD <sub>50</sub> 1000 to 2000 mg/kg (rat)
<b>Acute toxicity - Dermal:</b>	LD <sub>50</sub> >2000 mg/kg (rabbit)

### Li-700:

<b>Acute toxicity – Oral:</b>	Estimated LD <sub>50</sub> 3189 mg/kg
<b>Acute toxicity – Dermal:</b>	Estimated LD <sub>50</sub> 18130.6 mg/kg


<b>Skin irritation:</b>	Corrosive to the skin. Causes severe burns.
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<b>Eye irritation:</b>	Corrosive to eyes. Causes serious eye damage.
<b>Respiratory:</b>	May cause respiratory irritation.
<b>Ingestion:</b>	Irritating to mouth, throat and stomach.
<b>Sensitization:</b>	Not available.
<b>Potential acute health effects:</b>	
<b>Information on the likely routes of exposure:</b>	Routes of entry anticipated: Oral, Dermal, Inhalation.
<b>Eye contact:</b>	Causes serious eye damage. Adverse symptoms may include the following: pain, watering, redness.
<b>Inhalation:</b>	May cause respiratory irritation. Adverse symptoms may include the following: respiratory tract irritation, coughing
<b>Ingestion:</b>	Irritating to mouth, throat and stomach. Adverse symptoms may include the following: throat and stomach pain.
<b>Skin contact:</b>	Causes severe burns. Adverse symptoms may include the following: pain or irritation, redness, blistering may occur.
<b>Chronic toxicity:</b>	
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	Not available
<b>Teratogenicity</b>	No known significant effects or critical hazards.
<b>Specific target organ toxicity (single exposure)</b>	Propionic acid: respiratory tract irritation

## 12. ECOLOGICAL INFORMATION

<b>Propionic Acid:</b>	
<b>Aquatic</b>	Acute EC <sub>50</sub> 22.7 ppm fresh water ( <i>Daphnia</i> - <i>Daphnia magna</i> ) 48 hr Acute LC <sub>50</sub> 51 ppm fresh water (Fish - <i>Oncorhynchus mykiss</i> - Juvenile (Fledgling, Hatchling, Weanling)) 96 hr
<b>Summary:</b>	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Apply this product only as specified on the label.
<b>Mobility in soil</b>	Not available.
<b>Persistence and degradability</b>	Not available.
<b>Bioaccumulative potential (propionic acid)</b>	LogP <sub>ow</sub> 0.33. potential: low.
<b>Other adverse effects:</b>	No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

<b>Methods of disposal:</b>	Read label before use. Apply this product only as specified on the label. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409 <u>Container disposal</u> : Triple rinse container and add to spray tank. Recycle through the Agrecovery Programme. If this is not possible, bury in landfill according to local regulations.
	
<b>Empty container precautions:</b>	Do not contaminate any water, food or feed by storage or disposal. Avoid contamination of any water supply with chemical or empty container.

## 14. TRANSPORT INFORMATION - International transport regulations

<b>UN number:</b>	UN1848
<b>Class or Division:</b>	8
<b>Subsidiary Class:</b>	

**Packing Group:** III  
**Marine Pollutant:** No  
**Proper shipping name:** PROPIONIC ACID SOLUTION

**INTERNATIONAL AIR  
TRANSPORT ASSOCIATION  
(IATA):**

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## 15. REGULATORY INFORMATION

**ACVM Registered Number:** Exempt  
**HSNO Approval Code:** HSR002491

**Classification:** SKIN CORROSION - Category 1B  
SERIOUS EYE DAMAGE - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)  
(Respiratory tract irritation) - Category 3

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## 16. OTHER INFORMATION

**Additional information:** **Original Issue Date:** 5 September 2006  
**Revision Date:** 1 February 2023  
**Replaces:** ES468 – issued 23 Jan 2018

***Disclaimer EXCLUSION OF LIABILITY: PLEASE READ***

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