



MATERIAL SAFETY DATA SHEET
L.H.C.R.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name L.H.C.R.
Product No. 233-2
Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Contains Glycolic Acid)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application: Cleaning agent. - Acid concrete cleaner
Uses Advised Against For professional use only. This product is not recommended for any industrial, professional or consumer use other than the Identified uses above.

1.3. Details of the supplier of the safety data sheet

Supplier Autosmart Australia
11 Darrambal Close
Rathmines
NSW 2283
Australia
www.autosmartinternational.com
Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST) (General Information. Transport Information. Mild Medical Information)
autosmart@autosmartaustralia.com.au
Contact Person Mr. Russell Butler

1.4. Emergency telephone number

Emergency No: +44 7808 971321 (24hrs) (Autosmart International, UK)
General Information. Transport Information. Mild medical Information:-
Tel: 02 49 75 14 88 (Mon to Fri, 08:00 - 16:00 AEST)

SECTION 2: HAZARDS IDENTIFICATION

Risk Phrases

R36/38 Irritating to eyes and skin.

Safety Phrases

S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S35 This material and its container must be disposed of in a safe way.

2.1. Classification of the substance or mixture

2.2. Label elements

Detergent Labelling: < 5% amphoteric surfactants

Labelling



Irritant

L.H.C.R.**Risk Phrases**

R36/38 Irritating to eyes and skin.

Safety Phrases

S24/25 Avoid contact with skin and eyes.
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
 S35 This material and its container must be disposed of in a safe way.

2.3. Other hazards

This product does not contain any PBT or vPvB Substances.

Statement Of Hazardous Nature

HAZARDOUS SUBSTANCE (According to criteria of NOHSC). DANGEROUS GOODS (According to ADG Code).

ADR Class Class 8: Corrosive substances.

ADR Pack Group III

UN No. Road 3265

Emergency Action Code 2X

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Glycollic acid			5-10%
CAS-No.: 79-14-1	EC No.: 201-180-5	Registration Number: 01-2119485579-17-xxxx	
Classification (EC 1272/2008) Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318	Classification (67/548) Xn;R20. C;R34.		
2-(2-BUTOXYETHOXY)ETHANOL			2-5%
CAS-No.: 112-34-5	EC No.: 203-961-6		
Classification (EC 1272/2008) Eye Irrit. 2 - H319	Classification (67/548) Xi;R36		
TALLOW BIS(HYDROXYETHYL) BETAINE			1-2%
CAS-No.: 70750-46-8	EC No.: 274-845-0		
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548) Xi;R36/38.		

The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16.

SECTION 4: FIRST AID MEASURES**Susdp First Aid Instructions**

For advice, contact a Poisons Information Centre (Phone 13 1126) or a doctor.

If swallowed, do NOT induce vomiting.

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

4.1. Description of first aid measures

L.H.C.R.**Inhalation**

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

Remove victim immediately from source of exposure. Immediately rinse mouth and drink plenty of water (200-300 ml). DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Get medical attention.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Rinse the skin immediately with lots of water. Use suitable lotion to moisturise skin. Get medical attention if irritation persists after washing.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Make sure to remove any contact lenses from the eyes before rinsing.

4.2. Most important symptoms and effects, both acute and delayed**General information**

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation

Coughing, chest tightness, feeling of chest pressure. Sore throat.

Ingestion

May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

Skin contact

Severe irritation.

Eye contact

Extreme irritation of eyes and mucous membranes, including burning and tearing.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Extinguishing media**

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture**Hazardous Combustion Products**

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

When heated and in case of fire, corrosive vapours/gases may be formed.

5.3. Advice for firefighters**Special Fire Fighting Procedures**

No specific fire fighting procedure given. Keep up-wind to avoid fumes.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

Emergency Action Code 2X

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

For personal protection, see section 8.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses. To prevent release, place container with damaged side up. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

L.H.C.R.

Wear necessary protective equipment. Stop leak if possible without risk. Wash thoroughly after dealing with a spillage. Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery. Flush to sewer if local regulations permit.

6.4. Reference to other sections

See section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Keep above the chemical's freezing point to avoid rupturing the container.

Storage Class

Chemical storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Ingredient Comments**

No exposure limits noted for ingredient(s).

Glycollic acid (CAS: 79-14-1)**DNEL**

Consumer	Oral	Long Term	Systemic Effects	0.75 mg/kg/day
Consumer	Dermal	Short Term	Local Effects	28.85 mg/kg/day
Industry	Dermal	Long Term	Systemic Effects	57.69 mg/kg/day
Consumer	Inhalation.	Short Term	Local Effects	2.3 mg/m ³
Consumer	Inhalation.	Short Term	Systemic Effects	2.3 mg/m ³
Industry	Inhalation.	Short Term	Systemic Effects	9.2 mg/m ³
Industry	Inhalation.	Short Term	Systemic Effects	9.2 mg/m ³
Industry	Inhalation.	Long Term	Local Effects	1.53 mg/m ³
Industry	Inhalation.	Long Term	Systemic Effects	10.56 mg/m ³

PNEC

Freshwater	0.0321	mg/l
Sediment (Freshwater)	0.115	mg/l
Intermittent release	0.312	mg/l
Marinewater	0.0031	mg/l
STP	7	mg/l
Soil	0.007	mg/kg

8.2. Exposure controls**Protective equipment****Process Conditions**

Provide eyewash station.

Engineering measures

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use respiratory equipment with combination filter, type B+E/P3.

Hand protection

Use protective gloves made of: Neoprene. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

L.H.C.R.**Eye protection**

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Acidic.
Solubility	Soluble in water. Miscible with water
Boiling Point (°C)	~ 100°C @ 760 mm Hg
Melting point (°C)	~ 0°C
Relative density	~ 1.058 (20°C)
Vapour density (air=1)	Not applicable.
Vapour pressure	Not applicable.
Evaporation rate	Not available.
pH-Value, Conc. Solution	~ 1.6
pH-Value, Diluted Solution	~ 2.7 @ 1%
Viscosity	1.0 cSt @ 20°C
Decomposition temperature (°C)	Not available.
Odour Threshold, Lower	Not available.
Odour Threshold, Upper	Not available.
Flash point (°C)	Not applicable.
Auto Ignition Temperature (°C)	Not applicable.
Flammability Limit - Lower(%)	Not applicable.
Flammability Limit - Upper(%)	Not applicable.
Partition Coefficient (N-Octanol/Water)	Not available.
Oxidising properties	Not applicable.
Other Information	Information declared as "Not available" or "Not applicable" is not considered to be justified for enabling proper control measures to be taken.

9.2. Other information

Volatile Organic Compound (VOC) 0 g/litre

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reacts with alkalis and generates heat.

10.2. Chemical stability

Stable under normal temperature conditions.

L.H.C.R.**10.3. Possibility of hazardous reactions**

Not applicable.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with: Strong oxidising agents.

10.5. Incompatible materials**Materials To Avoid**

Strong alkalis.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Skin Corrosion/Irritation****Human Skin Model Test**

Scientifically unjustified.

Extreme pH

pH ≤ 2

Classification based on Conventional Method, and In Vitro Approaches - Corrosive or Irritant by measuring pH and Acid/Alkali Reserve.

Irritating.

General information

This product has low toxicity. Only large volumes may have adverse impact on human health.

Inhalation

May cause irritation to the respiratory system.

Ingestion

Liquid irritates mucous membranes and may cause abdominal pain if swallowed. May cause severe internal injury.

Skin contact

Strongly irritating. Prolonged contact may cause burns.

Eye contact

Extreme irritation of eyes and mucous membranes, including burning and tearing.

Health Warnings

Serious long-term effects are not known to be related to this type of product. No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain individuals with pre-existing or latent health problems.

Route of entry

Ingestion. Skin and/or eye contact.

Medical Symptoms

No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

Medical Considerations

Skin disorders and allergies.

Toxicological Information on Ingredients:**2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)****Toxic Dose 1 - LD 50**

5660 mg/kg (oral rat)

Other Health Effects

This substance has no evidence of carcinogenic properties.

L.H.C.R.**TALLOW BIS(HYDROXYETHYL) BETAINE (CAS: 70750-46-8)****Other Health Effects**

This substance has no evidence of carcinogenic properties.

Glycollic acid (CAS: 79-14-1)**Other Health Effects**

This substance has no evidence of carcinogenic properties.

Acute toxicity:**Acute Toxicity (Oral LD50)**

1938 mg/kg Rat

Acute Toxicity (Inhalation LC50)

~ 5.2 mg/l (vapours) Rat 4 hours

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. The product does not contain organic complexing agents with a DOC level of degradation of < 80% after 28 days. The product does not contain organically bound halogen.

Ecological Information on Ingredients:**2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)****Ecotoxicity**

The product is not expected to be toxic to aquatic organisms.

TALLOW BIS(HYDROXYETHYL) BETAINE (CAS: 70750-46-8)**Ecotoxicity**

The product is not expected to be toxic to aquatic organisms.

Glycollic acid (CAS: 79-14-1)**Ecotoxicity**

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

12.1. Toxicity**Acute Toxicity - Fish**

Not determined.

Acute Toxicity Aquatic Invertebrates

Not determined.

Acute Toxicity - Aquatic Plants

Not determined.

Acute Toxicity - Microorganisms

Not determined.

Acute Toxicity - Terrestrial

Not determined.

Ecological Information on Ingredients:**Glycollic acid (CAS: 79-14-1)****Acute Toxicity - Fish**

LC50 96 hours 164 mg/l Pimephales promelas (Fat-head Minnow)

12.2. Persistence and degradability**Degradability**

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. The product is biodegradable, but it must not be discharged into drains without permission from the authorities.

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Ecological Information on Ingredients:**2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)****Degradability**

The product is biodegradable.

TALLOW BIS(HYDROXYETHYL) BETAINE (CAS: 70750-46-8)**Degradability**

The product is easily biodegradable.

Glycollic acid (CAS: 79-14-1)**Degradability**

The product is biodegradable.

12.3. Bioaccumulative potential**Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

Partition coefficient

Not available.

Ecological Information on Ingredients:**2-(2-BUTOXYETHOXY)ETHANOL (CAS: 112-34-5)****Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

TALLOW BIS(HYDROXYETHYL) BETAINE (CAS: 70750-46-8)**Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

Glycollic acid (CAS: 79-14-1)**Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil**Mobility:**

The product is soluble in water.

Ecological Information on Ingredients:**TALLOW BIS(HYDROXYETHYL) BETAINE (CAS: 70750-46-8)****Mobility:**

The product is soluble in water.

Glycollic acid (CAS: 79-14-1)**Mobility:**

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

Ecological Information on Ingredients:**Glycollic acid (CAS: 79-14-1)**

This product does not contain any PBT or vPvB Substances.

12.6. Other adverse effects

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS**General information**

The packaging must be empty (drop-free, when inverted).

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction.

SECTION 14: TRANSPORT INFORMATION

L.H.C.R.**14.1. UN number**

UN No. Road	3265
UN No. Sea	3265
UN No., Air	3265

14.2. UN proper shipping name

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Contains Glycolic Acid)

14.3. Transport hazard class(es)

ADR Class No.	8
ADR Class	Class 8: Corrosive substances.
ADR Label No.	8
IMDG Class	8
ICAO Class	8
Transport Labels	

**14.4. Packing group**

ADR Pack Group	III
IMDG Pack Gr.	III
Air Pack Gr.	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

Segregation Group	1. Acids.
EMS	F-A, S-B
Emergency Action Code	2X
Tunnel Restriction Code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

Poisons Schedule Number 6

National Regulations And References

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). National Code of Practice for the Preparation of Material Safety Data Sheets. Approved Criteria for Classifying Hazardous Substances. Exposure Standards for Atmospheric Contaminants in the Occupational Environment. Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment. National Code of Practice for the Labelling of Workplace Substances. National Model Regulations for the Control of Workplace Hazardous Substances. National Code of Practice for the Control of Workplace Hazardous Substances. National Standard for the Storage and Handling of Workplace Dangerous Goods. National Code of Practice for the Storage and Handling of Workplace Dangerous Goods. Guidance Note for Placarding Stores for Dangerous Goods and Specified Hazardous Substances. Guidance Note for the Assessment of Health Risks Arising from Hazardous Substances in the Workplace. National Standard for the Control of Major Hazard Facilities. National Code of Practice for the Control of Major Hazard Facilities.

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**EU Legislation**

Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Health And Environmental Listings

Regulation EC 689/2008 concerning the export and import of dangerous chemicals.

Water hazard classification

WGK 1

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION**General information**

This product has been manufactured under ISO 9001 and ISO 14001 Quality and Environmental Management Systems.

Only trained personnel should use this material.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Issued By	Prepared by Autosmart International Ltd, Lynn Lane, Shenstone, Lichfield, Staffordshire, WS14 0DH, Great Britain. www.autosmartinternational.com rbutler@autosmart.co.uk Tel +44 (0)1543 481616
Revision Date	08/10/2013
Revision	6
Supersedes date	08/05/2013
Safety Data Sheet Status	Approved.

Risk Phrases In Full

R34	Causes burns.
R20	Harmful by inhalation.
R36/38	Irritating to eyes and skin.
R36	Irritating to eyes.

Hazard Statements In Full

H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.