

SAFETY DATA SHEET

Product Name **GRAFFITI REMOVER**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier name **LIBERATO BULK CHEMICAL & REPACK SPECIALISTS PTY. LTD.**
Address 1 Kalinga Way, Landsdale, WA, 6065, AUSTRALIA
Telephone 1300 377 696
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Email sales@liberato.com.au
Web site <http://www.liberato.com.au>
Synonym(s) GRAFFITI REMOVER- ALKALINE SOLUTION
Use(s) GRAFFITI REMOVER
SDS date 05 November 2013

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

RISK PHRASES

R20/22 Harmful by inhalation and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitisation by skin contact.

SAFETY PHRASES

S2 Keep out of reach of children.
S13 Keep away from food, drink and animal feeding stuffs.
S23 Do not breathe gas/fumes/vapour/spray (where applicable).
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
S37/39 Wear suitable gloves and eye/face protection.

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN number	None Allocated	DG class	None Allocated
Packing group	None Allocated	Subsidiary risk(s)	None Allocated
Hazchem code	None Allocated		

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Identification	Classification	Content
BENZYL ALCOHOL	CAS: 100-51-6 EC: 202-859-9	Xn;R20/22	>60%
ETHANOL	CAS: 64-17-5 EC: 200-578-6	F;R11	10 to 30%
D-LIMONENE	CAS: 5989-27-5 EC: 227-813-5	F;R10 Xi;R38 Xn;R43 N;R50/53	<10%
ETHANOLAMINE	CAS: 141-43-5 EC: 205-483-3	Xn;R20/21/22 C;R34	<10%
ETHOXYLATED ALCOHOL C9-C11	CAS: 68439-46-3 EC: 614-482-0	Not Available	<10%

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PEROXIDASE	CAS: 9003-99-0 EC: 232-668-6	Not Available	<10%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder

4. FIRST AID MEASURES

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
Advice to doctor	Treat symptomatically.
First aid facilities	Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

Flammability	Combustible. May evolve carbon oxides and hydrocarbons when heated to decomposition.
Fire and explosion	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
Extinguishing	Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways.
Hazchem code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear Personal Protective Equipment (PPE) as detailed in Section 8 of this SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.
Environmental precautions	Prevent product from entering drains and waterways.
Methods of cleaning up	Contain spillage, then cover/absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.
References	See Sections 8 and 13 for exposure controls and disposal.

7. STORAGE AND HANDLING

Storage	Store in a cool, dry, well ventilated area, preferably flammables store, removed from direct sunlight, incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Large storage areas should have appropriate fire protection and ventilation systems. Store as a Class C1 Combustible Liquid (AS1940).
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure standards**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Ethanol	SWA (AUS)	1000	1880	--	--
Ethanolamine	SWA (AUS)	3	7.5	6	15

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Biological limits No biological limit allocated.
Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended.

PPE

Eye / Face Wear splash-proof goggles.
Hands Wear nitrile or neoprene gloves.
Body Wear coveralls and rubber boots.
Respiratory Where an inhalation risk exists, wear a Type A (Organic vapour) respirator. If spraying, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator or an Air-line respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance DARK AMBER LIQUID
Odour CITRUS ODOUR
Flammability CLASS C1 COMBUSTIBLE
Flash point > 65°C
Boiling point 200°C
Melting point NOT AVAILABLE
Evaporation rate NOT AVAILABLE
pH 10.6 to 10.8
Vapour density NOT AVAILABLE
Specific gravity 1.03
Solubility (water) SOLUBLE
Vapour pressure 40 mm Hg @ 20°C
Upper explosion limit NOT AVAILABLE
Lower explosion limit NOT AVAILABLE
Partition coefficient NOT AVAILABLE
Autoignition temperature NOT AVAILABLE
Decomposition temperature NOT AVAILABLE
Viscosity NOT AVAILABLE
Explosive properties NOT AVAILABLE
Oxidising properties NOT AVAILABLE
Odour threshold NOT AVAILABLE
% Volatiles NOT AVAILABLE

10. STABILITY AND REACTIVITY

Chemical stability Stable under recommended conditions of storage.
Conditions to avoid Avoid shock, friction, heavy impact, heat, sparks, open flames and other ignition sources.
Material to avoid Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), heat and ignition sources.
Hazardous Decomposition Products May evolve carbon oxides and hydrocarbons when heated to decomposition.
Hazardous Reactions Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Harmful - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Chronic exposure to some solvents may result in central nervous system (CNS), liver and kidney damage. May cause sensitisation by skin contact.
Eye Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.

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Inhalation	Harmful - irritant. Over exposure may result in irritation of the nose and throat, coughing, nausea and headache. High level exposure may result in dizziness, drowsiness, breathing difficulties and unconsciousness. Chronic exposure to some solvents may result in central nervous system (CNS), liver and kidney damage.																																																																		
Skin	Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects. May cause sensitisation by skin contact.																																																																		
Ingestion	Harmful. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, dizziness and drowsiness. Aspiration may result in chemical pneumonitis and pulmonary oedema.																																																																		
Toxicity data	<p>BENZYL ALCOHOL (100-51-6)</p> <table><tr><td>LCLo (inhalation)</td><td>1000 ppm/8 hours (rat)</td></tr><tr><td>LD50 (ingestion)</td><td>1230 mg/kg (rat)</td></tr><tr><td>LD50 (skin)</td><td>2000 mg/kg (rabbit)</td></tr><tr><td>LDLo (skin)</td><td>10 g/kg (cat)</td></tr></table> <p>ETHANOL (64-17-5)</p> <table><tr><td>LC50 (inhalation)</td><td>20000 ppm/10 hours (rat)</td></tr><tr><td>LCLo (inhalation)</td><td>21900 ppm (guinea pig)</td></tr><tr><td>LD50 (ingestion)</td><td>3450 mg/kg (mouse)</td></tr><tr><td>LD50 (intraperitoneal)</td><td>3600 ug/kg (rat)</td></tr><tr><td>LD50 (intravenous)</td><td>1440 mg/kg (rat)</td></tr><tr><td>LD50 (subcutaneous)</td><td>8285 mg/kg (mouse)</td></tr><tr><td>LDLo (ingestion)</td><td>1400 mg/kg (human)</td></tr><tr><td>LDLo (intraperitoneal)</td><td>3000 mg/kg (dog)</td></tr><tr><td>LDLo (intravenous)</td><td>1600 mg/kg (dog)</td></tr><tr><td>LDLo (skin)</td><td>20 g/kg (rabbit)</td></tr><tr><td>LDLo (subcutaneous)</td><td>19440 (infant)</td></tr><tr><td>TCLo (inhalation)</td><td>20000ppm/7 hours (1-22 days pregnant rat - reproductive)</td></tr><tr><td>TDL0 (ingestion)</td><td>50 mg/kg (human)</td></tr></table> <p>D-LIMONENE (5989-27-5)</p> <table><tr><td>LD50 (ingestion)</td><td>4400 mg/kg (rat)</td></tr><tr><td>LD50 (intraperitoneal)</td><td>600 mg/kg (mouse)</td></tr><tr><td>LD50 (intravenous)</td><td>110 mg/kg (rat)</td></tr><tr><td>LD50 (skin)</td><td>> 5 gm/kg (rabbit)</td></tr><tr><td>LD50 (subcutaneous)</td><td>3170 mg/kg (mouse)</td></tr><tr><td>LDLo (subcutaneous)</td><td>30200 mg/kg (rat)</td></tr><tr><td>TDL0 (ingestion)</td><td>67 g/kg/39 weeks intermittently (mouse)</td></tr></table> <p>ETHANOLAMINE (141-43-5)</p> <table><tr><td>LD50 (ingestion)</td><td>620 mg/kg (guinea pig)</td></tr><tr><td>LD50 (intramuscular)</td><td>1750 mg/kg (rat)</td></tr><tr><td>LD50 (intraperitoneal)</td><td>50 mg/kg (mouse)</td></tr><tr><td>LD50 (intravenous)</td><td>225 mg/kg (rat)</td></tr><tr><td>LD50 (skin)</td><td>1 mL/kg (rabbit)</td></tr><tr><td>LD50 (subcutaneous)</td><td>1500 mg/kg (rat)</td></tr></table> <p>ETHOXYLATED ALCOHOL C9-C11 (68439-46-3)</p> <table><tr><td>LD50 (ingestion)</td><td>1378 mg/kg (rat)</td></tr><tr><td>LD50 (skin)</td><td>> 2000 mg/kg (rabbit)</td></tr><tr><td>TDL0 (ingestion)</td><td>1950 mg/kg/13 weeks intermittently (rat)</td></tr></table>	LCLo (inhalation)	1000 ppm/8 hours (rat)	LD50 (ingestion)	1230 mg/kg (rat)	LD50 (skin)	2000 mg/kg (rabbit)	LDLo (skin)	10 g/kg (cat)	LC50 (inhalation)	20000 ppm/10 hours (rat)	LCLo (inhalation)	21900 ppm (guinea pig)	LD50 (ingestion)	3450 mg/kg (mouse)	LD50 (intraperitoneal)	3600 ug/kg (rat)	LD50 (intravenous)	1440 mg/kg (rat)	LD50 (subcutaneous)	8285 mg/kg (mouse)	LDLo (ingestion)	1400 mg/kg (human)	LDLo (intraperitoneal)	3000 mg/kg (dog)	LDLo (intravenous)	1600 mg/kg (dog)	LDLo (skin)	20 g/kg (rabbit)	LDLo (subcutaneous)	19440 (infant)	TCLo (inhalation)	20000ppm/7 hours (1-22 days pregnant rat - reproductive)	TDL0 (ingestion)	50 mg/kg (human)	LD50 (ingestion)	4400 mg/kg (rat)	LD50 (intraperitoneal)	600 mg/kg (mouse)	LD50 (intravenous)	110 mg/kg (rat)	LD50 (skin)	> 5 gm/kg (rabbit)	LD50 (subcutaneous)	3170 mg/kg (mouse)	LDLo (subcutaneous)	30200 mg/kg (rat)	TDL0 (ingestion)	67 g/kg/39 weeks intermittently (mouse)	LD50 (ingestion)	620 mg/kg (guinea pig)	LD50 (intramuscular)	1750 mg/kg (rat)	LD50 (intraperitoneal)	50 mg/kg (mouse)	LD50 (intravenous)	225 mg/kg (rat)	LD50 (skin)	1 mL/kg (rabbit)	LD50 (subcutaneous)	1500 mg/kg (rat)	LD50 (ingestion)	1378 mg/kg (rat)	LD50 (skin)	> 2000 mg/kg (rabbit)	TDL0 (ingestion)	1950 mg/kg/13 weeks intermittently (rat)
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12. ECOLOGICAL INFORMATION

Toxicity	No information provided.
Persistence and degradability	No information provided.
Bioaccumulative potential	No information provided.
Mobility in soil	No information provided.
Other adverse effects	No information provided.

13. DISPOSAL CONSIDERATIONS

Waste disposal	Wearing the protective equipment outlined, ensure all ignition sources are extinguished. For small quantities, absorb on paper, sand or similar and evaporate under a fume cupboard or open area. For large volumes, atomise into incinerator (mixing with more flammable solvent if required) or recycle by gravimetric separation, distilling & reusing. Contact the manufacturer for additional information if required.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION**NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN number	None Allocated	None Allocated	None Allocated
Proper shipping name	None Allocated	None Allocated	None Allocated
DG class/ Division	None Allocated	None Allocated	None Allocated
Subsidiary risk(s)	None Allocated	None Allocated	None Allocated
Packing group	None Allocated	None Allocated	None Allocated
Hazchem code	None Allocated		

15. REGULATORY INFORMATION

Poison schedule	Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Inventory Listing(s)	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt. EUROPE: EINECS (European Inventory of Existing Chemical Substances) All components are listed on EINECS, or are exempt.

16. OTHER INFORMATION

Additional information	<p>EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).</p> <p>WORK PRACTICES - SOLVENTS: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.</p> <p>RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.</p> <p>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.</p>
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HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m ³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
REACH	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Revision history

Revision	Description
1.1	Standard SDS Review
1.0	Initial SDS Creation

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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End of SDS