CHEMFORCE

Chemforce GR2 Graffiti Remover for uncoated surfaces

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product Identifier

Product name: GR2

1.2 Uses and uses advised against

Uses: Removing graffiti from uncoated surfaces such as concrete, brick and painted surfaces.

1.3 Details of the supplier of the product

Supplier name	Chemforce Pty Ltd
Address	34 Law Court, Sunshine West, 3020, VIC, Australia
Telephone	+61 (0)417 339927
Email	john@chemforce.com.au

1.4 Emergency telephone numbers

Emergency	+61 (0)417 339927

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia

Signal Word

Danger

2.1 Hazard Classifications

Flammable Liquids - Category 3
Acute Toxicity - Oral - Category 4
Acute Toxicity - Inhalation - Category 4
Aspiration Hazard - Category 1
Skin Corrosion/Irritation - Category 1B
Serious Eye Damage/Irritation - Category 2A
Sensitisation - Skin - Category 1
Dangerous for the Environment

Revision: GHS version: 1
Date of Issue : 22 February 2020
Date Previous Issue : NA

2.2 Hazard Statements
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled. Prevention Precautionary Statements
P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, lighting and all other equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust, fume, gas, mist, vapours or spray.
P261 Avoid breathing dust, fume, gas, mist, vapours or spray.
P264 Wash hands, face and all exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective clothing, gloves, eye/face protection and suitable respirator.

2.3 Response Precautionary Statements

If medical advice is needed, have product container or label at hand.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting (to avoid aspiration). Rinse mouth with water If swallowed, give a glass of water to drink. If vomiting occurs, give further water. Seek medical assistance.
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IF ON SKIN: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice/attention.Wash contaminated clothing before re-use.

IF INHALED: Remove victim to fresh air and avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. and keep at rest in a position comfortable for breathing until fully recovered. Seek medical attention if effects persist.

IF IN EYES: Rinse cautiously with water for at least 15 minutes. Ensure irrigation under eyelids by occasionally lifting upper and lower eyelids while flushing with water. Remove contact lenses, if present and easy to do. Continue rinsing. In all cases of eye contamination, it is recommended to seek medical advice.

IN CASE OF FIRE: Use (insert appropriate media) for extinction.

2.4 Storage Precautionary Statements
Store in a well-ventilated place. Keep cool. Store locked up.

2.5 Disposal Precautionary Statement
Dispose of contents/container in accordance with local, regional, national and international regulations.

2.6 Poison Schedule:
Caution

2.7 DANGEROUS GOOD CLASSIFICATION

Dangerous Goods Class: 3
Subrisk 1: 8

Classified as a FLAMMABLE LIQUID and CORROSIVE, N.O.S., for the purpose of storage and handling, in accordance with the requirements of AS 1940.

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land". Refer to State Regulations for storage and transport requirements.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Regulation (EC) No. 1272/2008 (CLP)

Ingredients	Cas No.	Proportion	EINECS No. / REACH Registration
Benzyl Alcohol	100-51-6	20 - 40%	202-859-9
D-Limonene	5989-27-5	20 - 40%	227-813-5
Ethanol	64-17-5	20 - 40%	200-578-6
Potassium Hydroxide	1310-58-3	1 - 10%	215-181-3
Triethanolamine	102-71-6	< 3%	203-049-8
Deionized Water	7732-18-5	1 - 10%	NA

4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation:
Remove victim from exposure - avoid becoming a casualty.
Remove contaminated clothing and loosen remaining clothing.
Allow patient to assume the most comfortable position and keep warm. Keep at rest until fully recovered.
If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask.
If breathing has stopped, apply artificial respiration at once.
In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical assistance.

Skin Contact:
Effects may be delayed.
If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.
If swelling, redness, blistering or irritation occurs seek medical assistance.

For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble).

For skin burns, cover with a clean, dry dressing until medical help is available.
If blistering occurs, do NOT break blisters.
If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact:
Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open while irrigating.
Urgently seek medical assistance.

Ingestion:
Immediately rinse mouth with water.
If swallowed, do NOT induce vomiting.
Give a glass of water to drink.
NOTE - never give anything by the mouth to an unconscious patient.
If vomiting occurs, give further water.
Immediately call Poisons Centre or Doctor.

Notes to physician: Treat symptomatically. Effects may be delayed.

5. FIRE FIGHTING MEASURES

Hazchem Code: •3W

Suitable extinguishing media:
If material is involved in a fire use alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).

Specific hazards:
Flammable liquid and vapour. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Fire fighting further advice:
Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning or decomposing may emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

General Response Procedures:
Shut off all possible sources of ignition and do not smoke. Avoid accidents. Clean up immediately.
Increase ventilation. Avoid walking through spilled product as it is slippery when spilled.
Use clean, non-sparking tools and equipment.

Small spills:
Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels).
Rags and other combustible materials soaked with the product can auto-oxidize, generating heat and cigniting spontaneously.
Collect rags / used absorbent material and seal in non-flammable, properly labelled containers or drums for disposal.

Large Spills:
If safe to do so, shut off all possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Use a spark-free shovel. Collect and seal in properly labelled containers or drums for disposal.

Environmental precautions:
Do not let product enter drains or waterways.
If contamination of crops, sewers or waterways has occurred, advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: 18

7. HANDLING AND STORAGE

Handling:
Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage:
Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep the container upright. Keep containers closed when not in use - check regularly for leaks.

Classified as a FLAMMABLE LIQUID for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

This material is classified as a Class 3 Flammable Liquid, Class 8 Corrosive as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 5 (Caution) and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Substance	Occupational Exposure Limits
Ethyl alcohol	TWA exposure limit of 1,000 ppm or 1880 mg/m3 (15 min TWA) is recommended by analogy with sodium hydroxide (UK EH40).
Potassium hydroxide	TWA exposure limit of 2mg/m3

8.2 Exposure controls

Wear suitable protective equipment. Do not eat, drink or smoke at the job site.

8.2.1 Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

8.2.2 Personal Protection

Respiratory protection	Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Always use a respirator when working indoors. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter. Recommended filter - type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)
Eye/face protection	Chemical goggles (EN 166).
Skin protection	Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3, level 6 breakthrough time (>480min). Wear suitable overalls and foot protection.
Hygiene measures:	Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.
Biological Limit Values:	As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

8.2.3 Environmental Exposure Controls

Avoid release into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Material Family:	Organic Material
Base Units:	Litres
Form:	Clear Liquid
Colour:	Light Tan
Odour:	D'Limonene
Solubility:	Semi-miscible in water
Specific Gravity (20 °C):	0.94
Vapour Pressure (20 °C):	N Av
Flash Point (°C):	26
Flammability Limits (%):	N Av
Autoignition Temperature (°C):	N
Av Melting Point/Range (°C):	N
App Boiling Point/Range (°C):	90
pH:	~13
Viscosity:	N App Total
VOC (g/Litre):	~88% (Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

10.1 Chemical stability:
This material is thermally stable when stored and used as directed.

10.2 Conditions to avoid:
Elevated temperatures and sources of ignition. Rags and other combustible materials soaked in the product can spontaneously ignite, so used rags should be disposed of in a fireproof container.

10.3 Incompatible materials:
Oxidising agents.

10.4 Hazardous decomposition products:
Oxides of carbon and nitrogen, smoke and other toxic fumes. Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion	All symptoms of acute toxicity are due to high alkalinity. Material will cause irritation. Oral LD50 (rat) 3400 mg/kg bw
Inhalation	Mist is irritant to the respiratory tract. All symptoms of acute toxicity are due to high alkalinity. Inhalation LC50 (rat) >2.06 g/m³
Skin Contact	Material will cause irritation. Dermal LD50 (rat) >5000 mg/kg bw
Eye Contact	Material will cause irritation.
Skin corrosion/irritation	Irritating to skin.
Serious eye damage/irritation	Irritating to eyes.
Sensitisation	Not sensitising.

Mutagenicity	No evidence of genotoxicity. In vitro/in vivo negative.
Carcinogenicity	No structural alerts. IARC, NTP, OSHA, ACGIH do not list this product as known or suspected carcinogen.
Reproductive toxicity	No evidence of reproductive toxicity or developmental toxicity.
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified. NOAEL oral (rat) >159 mg/kg bw/d
Aspiration hazard	Not classified

12. ECOLOGICAL INFORMATION

12.1 Toxicity Fish (Leuciscus idus) LC50 (48 hour) >146 mg/l Aquatic invertebrates: (Daphnia magna) EC50 (24 hour) >146 mg/l

12.2 Persistence and degradability

Inorganic. Soluble silicates, upon dilution, rapidly depolymerise into molecular species indistinguishable from natural dissolved silica.

12.3 Bioaccumulative potential

Inorganic. The substance has no potential for bioaccumulation.

12.4 Mobility in soil Not applicable.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

13. DISPOSAL CONSIDERATIONS

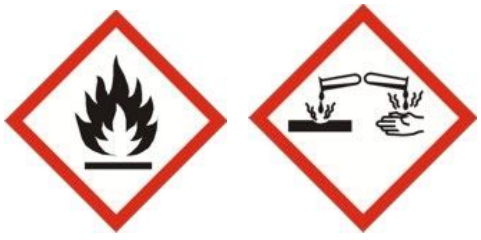
13.1 Waste treatment methods

Dispose of this material and its container to hazardous or special waste collection point.
Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".



UN No:	2924
Dangerous Goods Class:	3
Subrisk 1:	8
Packing Group:	III
Hazchem Code:	•3W
Emergency Response Guide No:	18

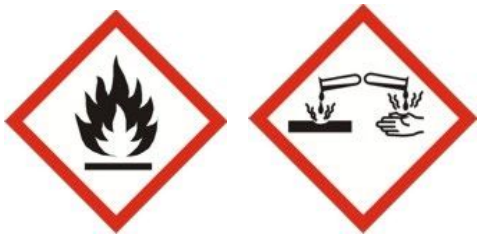
Proper Shipping Name: FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2), toxic substances (Class 6.1), infectious substances (Class 6.2) or radioactive substances (Class 7). Exemptions may apply

MARINE TRANSPORT
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No:	2924
Dangerous Goods Class:	3
Subrisk 1:	8
Packing Group:	III
Proper Shipping Name:	FLAMMABLE LIQUID, CORROSIVE, N.O.S.

AIR TRANSPORT
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



UN No:	2924
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Subrisk 1:	8
Packing Group:	III
Proper Shipping Name:	FLAMMABLE LIQUID, CORROSIVE, N.O.S.

15. REGULATORY INFORMATION

This material/constituent(s) is covered by the following requirements: • The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth). • All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Chemforce gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Chemforce accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

CONTACT NUMBER FOR POISONS CENTRE
For advice, immediately contact a doctor, ambulance, or, a Poison Information Centre:
Australia 13 11 26 (Australia Wide)
USA - American Association of Poison Control Centres 1-800-222-1222
Canadian Poison Centres – Ontario (24/7): Telephone: 416-813-5900; Toll free: 1-800-268-9017
UK - England and Wales: NHS 111 - dial 111;
Scotland: NHS 24 - dial 111;
Republic of Ireland: 01 809 2166
New Zealand Poisons Centre: 0800 POISON / 0800 764766