1. Product and Company Identification

1.1 PRODUCT NAME: EQUUS GRAFFITISTRIP

1.2 USE OF PRODUCT A solvent based gel used for removal of surface graffiti from Equus anti-graffiti system treated surfaces.

1.3 SUPPLIER:

Equus Industries Ltd
Sheffield Street
Riverlands Industrial Estate
Blenheim, Marlborough, New Zealand
Telephone: +64 3 578 0214
Fax: +64 3 578 0919

1.4 EMERGENCY CONTACT:

National Poison Centre
Telephone: 0800 764 766

Information about Safety Data Sheet: Telephone: +64 3 578 0214 8:00am – 6:00pm Mon - Fri

2. Hazards Identification

2.1 Classification:
This product is hazardous and a non-dangerous good.

2.2 Risk/Safety Phrases:
R11,36,41,66,67
S2,9,16,25,33,36,37,39

The full text of each R & S phrases is listed in Section 16.

3. Composition/Information on Ingredients

3.1 Chemical Characterization (Preparation):
This product is a preparation.

3.2 Hazardous Ingredients:

CAS NO.	COMPONENT	CONCENTRATION %	CLASSIFICATION
78-93-3	Methyl ethyl ketone	20-40%	R11/36/66/67
108-65-6	1-Methoxy-2-propanol acetate	20-40%	R10/36
127087-87-0	Branched 4-nonyphenolethoxylate	<10%	R20/41

3.3 Only ingredients, additives and impurities which are classified and contribute to the classification of the product are included in this section.

4. First Aid Measures

4.1 After Inhalation:
Remove person to fresh air immediately. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek medical attention immediately. Give oxygen or artificial respiration as needed.

4.2 After Skin Contact:
Remove contaminated clothing. Wash affected area thoroughly, with soap and water. Flush with lukewarm water for 15 minutes. Seek medical attention if irritation persists.

4.3 After Eye Contact:
Immediately flush the eyes with large amounts of clean low pressure water for at least 15 minutes, occasionally lifting the upper and lower lids. If pain or irritation persists, seek medical attention promptly.

4.4 After Ingestion:
Do not induce vomiting. If large quantity swallowed, give lukewarm water (1/2 litre) if victim completely conscious and alert. Risk of damage to lungs exceeds poisoning risk. Seek emergency medical attention immediately.

4.5 Advice to Doctor:
Treat symptomatically based on individual reactions of patient and judgement of doctor. If ingested, product may be aspirated into the lungs and cause chemical pneumonitis.

5. Fire Fighting Measures

5.1 Suitable Extinguishing Media:
Use dry chemicals, carbon dioxide, water spray or alcohol resistant foam. Do not use solid water stream.

5.2 Protective Equipment:
Use accepted fire fighting techniques. Wear full fire fighting protective clothing, including self contained breathing apparatus (SCBA).

5.3 Specific Hazards:

Highly flammable liquid. When heated above the flash point, releases flammable vapours. When mixed with air and exposed to ignition source, vapours can burn in open or explode if confined. Vapours may be heavier than air. May travel long distances along the ground before igniting and flashing back to vapour source. Fine sprays/mists may be combustible at temperatures below normal flash point.

5.4 Combustion Products:

Carbon dioxide, carbon monoxide, fumes, smoke and other toxic vapours.

5.5 Precautions in Connection with Fire:

Fight fire from a safe distance/protected location. Heat may build enough pressure to rupture closed containers, spreading fire, and increasing risk of burns/injuries. Use water spray/fog for cooling. Avoid frothing/steam explosion. Burning liquid may float on water. Although water soluble, may not be practical to extinguish fire by water dilution. Notify authorities immediately if liquid enters sewer or public water ways, drains etc.

6. Accidental Release Measures

6.1 Preliminary Action and Precautions:

6.1.1 Eliminate every possible source of ignition.

6.1.2 Evacuate all personnel immediately and ventilate area.

6.1.3 Avoid contact with skin, eyes and clothing.

6.1.4 Wear recommended personal protective equipment.

6.1.5 Shut off leaks if possible without risk.

6.1.6 Dike in the spilled product as much as possible with inert material (i.e. sand or soil)

6.1.7 Prevent entry of product into sewers, storm water drains and open bodies of water.

6.1.8 Collect the spillage in closable, suitable containers for reuse or disposal.

6.1.9 Clean up and spills as soon as possible, using an inert absorbent material and eliminate as hazardous waste.

6.1.10 Material can create slippery conditions.

6.1.11 Use spark proof tools and equipment for clean up.

7. Handling and Storage

7.1 Handling:

7.1.1 Prevent inhalation of vapour, ingestion and contact with skin, eyes and clothing.

7.1.2 Keep container closed when not in use. Precautions also apply to emptied containers.

7.1.3 Clean hands thoroughly after handling, before eating, smoking, drinking or using the toilet.

7.1.4 Do not eat or drink while handling the product.

7.1.5 Remove soiled work clothes and launder before reuse.

7.1.6 Do not smoke, weld, generate sparks, or use flame near container. Vapours may migrate to sources of ignition.

7.1.7 Prevent generation of static discharges, use bonding/grounding connection when pouring liquid.

7.1.8 Extinguish all ignition sources including pilot lights, non-explosion proof motors and electrical equipment in vicinity of work area, until vapours dissipate.

7.1.9 Open containers slowly in order to control possible pressure release.

7.2 Storage:

7.2.1 Store in a cool, dry, well ventilated area.

7.2.2 Store away from sources of ignition, (i.e. sparks, open flames, heat etc.)

7.2.3 Store away from strong acids, and strong oxidizing agents.

7.2.4 Keep containers tightly closed at all times.

8. Exposure Controls and Personal Protection Equipment

8.1 Exposure Limits:

Methyl ethyl ketone	Cas – 78-93-3	TLV/TWA (ACGIH):	200ppm	(445mg/m^3)
		STEL (ACGIH):	300ppm	(890mg/m^3)
1-methoxy-2-propanol acetate	Cas – 108-65-6	TLV/TWA (ACGIH):	50ppm	(274mg/m^3)
		STEL (ACGIH):	100ppm	(548mg/m^3)

8.2 Exposure Controls:

8.2.1 Exposure Controls in the Work Place:
General use is for exterior situations with adequate ventilation. If used in areas of poor ventilation a system of local and/or general exhaust is recommended to keep exposure limits as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use explosion proof ventilation equipment

8.2.2 Personal Protection Equipment

Respiratory Protection – Wear appropriate, properly fitted NIOSH/MSHA, approved organic vapour or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS.

Hand Protection – Wear chemically resistant gloves such as neoprene.

Eye Protection – Wear appropriate eye protection. Wear chemical safety goggles and/or face shield when possibility exists for eye contact, due to splashing or spraying liquid, airborne particles or vapour. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.

Skin/Body Protection - Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. The equipment must be cleaned thoroughly after each use.

Protective Measures - Use professional judgement in the selection, care and use. Inspect and replace equipment at regular intervals.

8.2.3 Additional Remarks:

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task to be performed, conditions present, duration of use and the hazards and/or potential hazards that may be encountered during use. Emergency eye wash facilities and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse.

9. Physical and Chemical Properties

9.1 General Information:

Physical State/Form	Gel
Colour	Clear/milky
Odour	Solvent
pH	Not applicable
Vapour Pressure	Not available
Vapour Density	Not available
Boiling Point/Range	Not available
Flash Point	Not available
Melting Point	Not available
Water Solubility/Miscibility	Miscible
Autoignition Temperature	Not available
Explosion Limits	Not available
Specific Gravity	0.96
VOC	875 g/l

10. Stability and Reaction

10.1 General Information:

This material is stable when properly handled and stored.

10.2 Conditions to Avoid:

Avoid excessive heat, direct sunlight, static discharges, high temperatures and oxidizing conditions. Ignition may occur at temperatures below those published in the literature as Autoignition or ignition temperatures.

10.3 Material to Avoid:

Strong oxidizing agents and acids.

10.4 Hazardous Decomposition Products:

None expected when material properly handled and stored. For thermal decomposition see Section 5.

11. Toxicological Information

11.1 Acute toxicity:

1-Methoxy-2-propanol acetate:
Oral LD 50: (Rat) 8,532 mg/kg
Dermal LD50: (Rat) > 5,000 mg/kg

11.2 Skin Contact:

No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin contact, Possible systemic toxicity by skin absorption.

11.3 Eye Contact:

Irritating to the eyes. Will injure eye tissue. Symptoms may include burning sensation, tearing, redness or swelling.

11.4 Ingestion:

May cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting, lethargy or diarrhea.

11.5 Inhalation:

May cause irritation to the respiratory system. May cause nausea, headaches and dizziness. Could be anaesthetic and may have other central nervous system effects.

11.6 Chronic effects:

Prolonged or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Prolonged or repeated exposure may irritate the mucous membranes. Small amount of liquid aspirated into the lungs from ingestion of the product or from vomiting may cause chemical pneumonitis or pulmonary edema.

11.7 Aggravated Medical Conditions:

Pre existing disorders or diseases of the eye. This material may affect mucous tissue and/or aggravate mucous membrane dysfunction.

12. Ecological Information

12.1 Environment Protection:

Prevent product from entering drains, sewers and waterways.

12.2 Ecotoxicity:

1-Methoxy-2-propanol acetate: LC50 (Fish) - 161 mg/l (96 hours)
EC50 (Daphnia magna) - >500 mg/l (48 hours)

12.3 Persistence and degradability:

This product is expected to be readily biodegradable. Transformation due to hydrolysis is not expected to be significant. Expected to degrade at a moderate rate in water when exposed to sunlight. Transformation due to atmospheric oxidation not expected to be significant.

12.4 Bioaccumulative Potential:

Data not available.

13. Disposal Consideration

13.1 Material

Dispose of according to regulations by incineration in a special waste incinerator or landfill at a permitted facility in accordance with local/national regulations.

14. Transport Information

14.1 Land Transport:

Road: Flammable Liquid N.O.S (Class: 3, GP II, HAZ CHEM 3Y)

Rail: Flammable Liquid N.O.S (Class: 3, GP II, HAZ CHEM 3Y)

14.2 Sea Transport: Flammable Liquid N.O.S (Class: 3.3, GP II, HAZ CHEM 3Y)

14.3 Air Transport: Flammable Liquid N.O.S (Class: 3, GP II, HAZ CHEM 3Y)

14.4 Postal and Courier Service: Can not transported.

15. Regulatory Information

This product is flammable and hazardous.

16. Other Information

16.1 Full Text of R-Phrases Contained in Section 2:

R11	Highly flammable
R36	Irritating to eyes
R41	Risk of serious damage to eyes
S66	Repeated exposure may cause skin dryness or cracking
S67	Vapours may cause drowsiness and dizziness

16.2 Full Text of S-Phrases Contained in Section 2:

S2	Keep out of the reach of children
S9	Keep container in well ventilated place
S16	Keep away from sources of ignition – No smoking
S25	Avoid contact with eyes
S33	Take precautionary measures against static discharges
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection

16.3 The information contained in this Data Sheet relates only to the specific material identified. Equus Industries Ltd believes the information to be accurate and reliable as at the date of this Data Sheet. No Warranty, Guarantee or representation is expressed or implied by the Company as to the absolute correctness or completeness of any representation contained in this Data and assumes no legal responsibility in connection therewith. It can not be assumed that all acceptable safety measures are contained in this Data Sheet, or that additional measures may not be required under particular or exceptional circumstances or conditions.