

Mountain Cleaning Products

777 Snow St., SOUTH LISMORE. 2480

Phone: (02) 66228733

Fax: (02) 66228744

Emergency : (02) 66242692

MATERIAL SAFETY DATA SHEET

Product : GLYCOL BEER LINE CLEANER

Date of Issue : AUGUST 2007

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Email: mountain@nor.com.au

SECTION 1 – STATEMENT OF HAZARDOUS NATURE, CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER:	MOUNTAIN CLEANING PRODUCTS		
ADDRESS:	777 Snow Street, South Lismore, NSW, 2480		
Trade Name:	" GLYCOL BEER LINE CLEANER"		
TELEPHONE:	(02) 66228733	FAX:	(02) 66228744
AH EMERGENCY TELEPHONE:	13 1126 in Australia	ABN:	
Substance:	Water based cleaner	Product Use:	Detergent
Creation Date:	AUG 2007	Revision Date:	AUG 2012
Product Code:	6621		

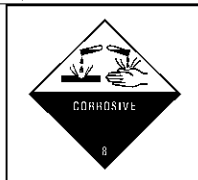
SECTION 2 – HAZARDS IDENTIFICATION

This product is classified as **HAZARDOUS** according to criteria of the National Occupational Health and Safety Commission Australia. This product is classified as **Dangerous Goods Class 8** according to the Australian Dangerous Goods (ADG) Code. This product is classified as a **Schedule 6 Poison** according to the SUSDP.

Approved Criteria Classification (calculated)	C – Corrosive R20 – Harmful by inhalation. R36/37/38 - Irritating to eyes, respiratory system and skin. S2 – Keep out of reach of children.		
UN Number	2491	ADG Classification	8
Shipping Name	ETHANOLAMINE SOLUTION	ADG Subsidiary Risk	none allocated
Hazchem Code	2X	Packing Group	III
SUSDP Classification	S6 POISON		

EMERGENCY OVERVIEW

Colour	Straw	Odour	faint ammonia odour
Physical Description	Liquid	Viscosity	Non-viscous liquid
Major Health Hazards	CORROSIVE – skin, eyes, mucous membranes.		



SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication "List of Designated Hazardous Substances" or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication "Approved Criteria for Classifying Hazardous Substances".

Ingredients:	CAS Number:	Proportion:	Exposure Standards TWA	Exposure Standards STEL
Ethanolamine	141-43-5	30 - 60% w/w	3 ppm 7.5 mg/ m ³	6 ppm (15 min) 15 mg/ m ³
Disodium metasilicate	6834-92-0	< 10 % w/w	not set	not set
Ingredients determined to be non-hazardous	various	10 – 30 % w/w	not set	not set
Water	7732-18-5	> 60 % w/w	not set	not set

The TWA exposure value is the Time Weighted Average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

SECTION 4 – FIRST AID MEASURES

Scheduled Poisons	Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 03 474 7000).
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First Aid Facilities	Normal washroom facilities. Safety shower and emergency eye wash.
Inhalation	Remove victim to fresh air away from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position, keep warm and to rest. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a face mask. If breathing has stopped apply artificial respiration at once. Seek immediate medical advice (e.g. doctor).
Skin contact	Wash skin with plenty of water. Remove contaminated clothing and wash before re-use. Seek medical advice (e.g. doctor) if irritation, burning or redness develops.
Eye contact	Immediately irrigate with copious quantities of water for at least 20 minutes. Eyelids to be held open. Seek medical advice (e.g. ophthalmologist).
Ingestion	Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. Seek medical advice (e.g. doctor).
Advice to Doctor	No specific antidote. Treat symptomatically. All treatments should be based on observed signs and symptoms of distress of the patient. Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons.
Aggravated Medical Conditions	None known.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Water based. Not combustible. However if involved in a fire will emit toxic fumes. Can react with metals to produce flammable hydrogen gas.
Extinguishing Media	Use carbon dioxide (CO2) fire extinguisher, water fog or fine water spray.
Fire Fighting	Keep containers exposed to extreme heat cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion or decomposition. Evacuate area - move upwind of fire.
Flash Point	None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures	HAZCHEM CODE : 2X 2 = water fog – in the absence of fog, a fine spray may be used. X = No risk of violent explosion, Full protective clothing, contain.
Occupational Release	Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water courses. Wear appropriate protective equipment as in section 8 below to prevent skin and eye contamination. Spilt material may result in a slip hazard and should be absorbed into dry, inert material (e.g. sand, earth or vermiculite), which then can be put into appropriately labelled drums for disposal by an approved agent according to local conditions. Wash area down with excess water. Residual deposits will remain slippery. Carefully neutralize residues with vinegar or other acid. If contamination of sewers or waterways has occurred advise the local emergency services. In the event of a large spillage notify the local environment protection authority or emergency services.

SECTION 7 – HANDLING AND STORAGE

Handling	Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with water after handling.
Storage	Store in a cool, dry, place with good ventilation. Avoid storing in aluminium and light alloy containers. Store away from incompatible materials (Section 10). Keep containers closed at all times – check regularly for leaks.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

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Exposure Limits	National Occupational Exposure Limits, as published by National Occupational Health & Safety Commission: Time-weighted Average (TWA): None established for specific product. See SECTION 3 for Exposure Limits of individual ingredients. Short Term Exposure Limit (STEL): None established for specific product. See SECTION 3 for Exposure Limits of individual ingredients.
Biological Limit Value	None established for product.
Engineering Controls	Ensure ventilation is adequate to maintain air concentrations below exposure standards. Avoid generating mists of the product. Use only in a well-ventilated area. Ensure airflow, where this product is used, is directed away from the operators. Avoid using aluminium or copper (or their alloys) as materials of construction.
Personal Protective Equipment	Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure. Final choice of appropriate protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. The following protective equipment should be available;
Eye Protection 	The use of chemical goggles or a face shield is recommended. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.
Skin Protection 	Overalls, apron, rubber boots and elbow length gloves are recommended for handling the concentrated product (as per AS/NZS 2161, or as recommended by supplier) to handle in quantity, cleaning up spills, decanting, etc.
Protective Material Types	Material suitable for alkaline detergent contact – Butyl rubber, Natural Latex, Neoprene, PVC, and Nitrile.
Respirator 	Generally not required for handling diluted solutions of the product to clean beer lines. Where high contaminant spray mist or vapour levels exist, ie, approaching the exposure limit, the following additional equipment is required: For short elevated exposures, eg, spillages:- Appropriate organic vapour cartridge respirator as per the requirements of AS/NZS 1715 and AS/NZS 1716 (Respiratory protective devices). For prolonged exposure and confined spaces:- full face air supplied or self contained breathing apparatus (if vapour levels exceed the Exposure Limit by more than ten times, air supplied apparatus should be used).

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Non-viscous liquid	Colour	straw
Odour	faint ammonia odour.	Specific Gravity	1.0 – 1.1 @ 25 °C
Boiling Point	Approximately 100 °C.	Freezing Point	Approximately 0 °C
Vapour Pressure	Not available	Vapour Density	Not available.
Flash Point	Not flammable	Flammable Limits	none
Water Solubility	Miscible in all proportions.	pH	>12 neat
Volatile Organic Compounds (VOC)	Ca 50 % v/v.	Coefficient of Water/Oil Distribution	Not available.
Viscosity	Not available.	Odour Threshold	Not available.
Evaporation Rate	Not available.	Per Cent Volatile	Ca 80 % v/v.

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability	Stable at normal temperatures and pressure. Contamination of product and exposure to light and heat will accelerate decomposition.
Conditions to Avoid	ACIDS: violent reaction can occur, yielding heat and pressure which can burst an enclosed container. Attacks many reactive metals (aluminium/magnesium/zinc alloys) releasing highly flammable gas (hydrogen) which generates fire or explosion hazards.
Incompatible Materials	Reacts vigorously with acids. Reacts with metal salts, peroxides and reducing agents.
Hazardous Decomposition Products	Product can decompose on combustion to form Carbon Monoxide, Carbon Dioxide, and other possibly toxic gases and vapours. Reacts vigorously with acids.
Hazardous Reactions	Reacts vigorously with acids.

SECTION 11 – TOXICOLOGICAL INFORMATION

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POTENTIAL HEALTH EFFECTS	
Ingestion	
short term exposure	May cause irritation, damage to throat and esophagus, nausea, abdominal pain, vomiting, shock-like state, fall in blood pressure, slow pulse, cyanosis (discolouration of skin), convulsions and coma.
long term exposure	No information available.
Skin contact	
short term exposure	Corrosive to skin - may cause skin burns, severe irritation. Irritating to skin. May cause redness, pain and blistering. Danger of skin absorption. Corrosion will continue until removed. Severity depends on the concentration and duration of exposure. Burns are not immediately painful; onset of pain may be minutes to hours.
long term exposure	Repeated or prolonged skin contact may cause chronic dermatitis. May cause development of allergies in sensitive individuals.
Eye contact	
short term exposure	Vapour or liquid can cause severe eye irritation and burns with redness, pain and blurred vision. Dilute solutions can cause severe corneal damage.
long term exposure	Repeated overexposure may lead to chronic conjunctivitis.
Inhalation	
short term exposure	Harmful by inhalation. May cause irritation to nose, throat and lungs in high concentrations. Symptoms of exposure may include a burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, possible spasm, inflammation and edema of the larynx and bronchi. Very high concentrations may cause severe lung damage (chemical pneumonitis, pulmonary edema) with possible injury to liver and kidneys.
long term exposure	Repeated overexposure may lead to increased susceptibility to respiratory illness.
Carcinogen Status	
NOHSC	No significant ingredient is classified as carcinogenic by NOHSC.
NTP	No significant ingredient is classified as carcinogenic by NTP.
IARC	No significant ingredient is classified as carcinogenic by IARC.
Medical conditions aggravated by exposure	Persons with pre-existing skin disorders or eye problems, or impaired kidney or respiratory function may be more susceptible to the effects of the substance.
PRODUCT MIXTURE INFORMATION	
Local Effects	Corrosive and harmful: eye, skin, inhalation and ingestion.
Target Organs	Eyes, mucous membranes, skin, lungs.
CLASSIFICATION OF INDIVIDUAL INGREDIENTS	
Ingredients	R-Phrases.
Monoethanolamine	R20, R36/37/38
Disodium metasilicate	R34, R37
Individual Ingredient Information	
NOTE : This information relates to each individual ingredient, when evaluated as pure undiluted chemical. See Section 3 for proportions of ingredients present in the product.	
100% Monoethanolamine	
Irritation Data	Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. A severe eye irritant. Contamination of eyes can result in permanent injury. Material is irritant to the mucous membranes of the respiratory tract (airways).
Toxicity Data	Available evidence from animal studies indicate that repeated or prolonged exposure to this material could result in effects on the liver and kidneys. Oral LD50 (rat): 1,720 mg/kg. Oral LD50 (mice): 700 mg/kg. Dermal LD50 (rabbit): 1 mL/kg. Inhalation LC50 (mice): >2,420 mg/m ³ /2hr. SKIN: Moderate irritant (rabbit). EYES: Severe irritant (rabbit).
Local Effects	Corrosive: inhalation, skin, eye, ingestion
Target Organs	Skin, mucous membranes, eyes.
Acute Toxicity Level	Moderately Toxic: ingestion

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Reproductive Effects	No available information.
Mutagenic Data	No available information.
Carcinogenic Data	Carcinogenicity studies in mice, dermally administered diethanolamine over a lifetime developed liver and kidney tumours. However, in similarly treated rats there was no evidence of carcinogenicity.
100% Disodium metasilicate:	
Irritation Data	Hazardous in case of skin contact (corrosive), of ingestion (corrosive), of inhalation (lung irritant). Causes burns Eye: Risk of serious damage to eyes. Respiratory: Irritating to respiratory system. Sensitization: No sensitizing (30% w/w in a formulation). 250 mg/24 hour(s) skin-human : severe 250 mg/24 hour(s) skin-rabbit : severe. 250 mg/24 hour(s) skin-guinea pig : moderate.
Toxicity Data	1153 mg/kg oral-rat LD50; 770 mg/kg oral-mouse LD50; 250 mg/kg oral-dog LDLo; 250 mg/kg oral-pig LDLo; 200 mg/kg intraperitoneal-guinea pig LDLo. Other toxicological information: The toxic effects of the product are caused by the alkalinity and not by substance specific corrosive nature of the product.
Local Effects	Corrosive: inhalation, skin, eye, ingestion
Target Organs	Skin, mucous membranes, eyes.
Acute Toxicity Level	Moderately Toxic: ingestion
Mutagenic Data	Gentoxicity: Not mutagenic (in vitro)
Reproductive Effects Data	15 gm/kg oral-rat TDLo 14 week(s) male week(s) pre pregnancy/14 week(s) post pregnancy/3 week(s) continuous; 9766 ug/kg subcutaneous-rat TDLo 1 day(s) male; 9766 ug/kg intratesticular-rat TDLo 1 day(s) male.

SECTION 12 – ECOLOGICAL INFORMATION

Fish toxicity	None available for specific product. For ETHANOLAMINE: Onchorhynchus mykiss LC50: 150 mg/l/96 h neutral. Pimephales promelas (Fathead minnow) LC50: 227 mg/l/96 h. Brachydanio rerio LC50: >2000 mg/l/96 h. Lepomis macrochirus (Bluegill) LC50: >300 mg/l/96 h
Algae toxicity	None available for specific product. For ETHANOLAMINE: None available. Sc. quadricauda IC5: 0.75 mg/l/8 d neutral. Scenedesmus subspicatus EC50: 15 mg/l/72 h
Invertebrates toxicity	None available.
Toxicity to Bacteria	None available for specific product. For ETHANOLAMINE: None available. activated sludge EC50: >1000 mg/l/3 h. Protozoa: E. sulcatum EC5: 45 mg/l/72 h neutral.
OECD Biological degradation	Individual components stated to be biodegradable. None available for specific product. For ETHANOLAMINE: BOD5: 08 g/g. TOD: 1.31 g/g. Biologic degradation: Readily biodegradable. Biodegradation: >70%/28d modified OECD screening test (OECD 301E). Distribution: log Pow: -1.91 (25 °C) (experimental)
General	None available for specific product. For ETHANOLAMINE: Biological effects: Harmful effect due to pH shift. When introduced properly, no impairments in the function of adapted biological waste-water-treatment plants are to be expected. Not bioaccumulative (Bioconcentration Factor < 1 (calculated)). Product miscible in all proportions with water. DO NOT DISCHARGE BULK QUANTITIES INTO DRAINS, WATERWAYS, SEWER OR ENVIRONMENT. Inform local authorities if this occurs. The pH rise is responsible for the environmental effect on the aquatic life. If not neutralized, this product can be toxic for aquatic organism because of its alkalinity. PH >9 has a corrosive effect on fish (possibly causing death). PH >8.5 will result in destruction of algae.

SECTION 13 – DISPOSAL CONSIDERATIONS

	Refer to State Land Waste Management Authority. Transfer product residues to a labelled, sealed container for disposal or recovery. Waste disposal must be by an accredited contractor. Do not put down the drain.
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SECTION 14 – TRANSPORT INFORMATION

UN Number	2491	ADG Classification	8
Shipping Name	ETHANOLAMINE SOLUTION	ADG Subsidiary Risk	none allocated
Hazchem Code	2X	Packing Group	III
Packaging Method	3.8.8 RT7 RT8	Special Provisions	SP223

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Segregation	This material is a Class 8 Corrosive Substance according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Class 8 - Corrosive Substances are incompatible in a placard load with any of the following: Class 1, Explosives, Class 4.3, Dangerous When Wet Substances, Class 5.1, Oxidizing Agents & Class 5.2 Organic Peroxides, Class 6, Toxic Substances (where the Toxic substances are cyanides and the corrosives are acids), Class 7, Radioactive Substances, Class 8, Corrosive Substances (concentrated strong acid is to be segregated from strong alkali), and are incompatible with food and food packaging in any quantity.
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SECTION 15 – REGULATORY INFORMATION	
AICS	All ingredients present on AICS.

SECTION 16 – OTHER INFORMATION			
Labeling Details	HAZARD	C	CORROSIVE
	RISK	R20	Harmful by inhalation.
	PHRASES	R36/37/38	Irritating to eyes, respiratory system and skin.
	SAFETY PHRASES	S2	Keep out of reach of children.
	SUSDP	S6	POISON (>20% ETHANOLAMINE)
	ADG Code	8	ETHANOLAMINE SOLUTION
Acronyms	SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons.	
	ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail.	
	CAS Number	Chemical Abstracts Service Registry Number.	
	UN Number	United Nations Number.	
	R-Phrases	Risk Phrases.	
	HAZCHEM	An emergency action code of numbers and letters which gives information to emergency services.	
	NOHSC	National Occupational Health and Safety Commission.	
	NTP	National Toxicology Program (USA).	
	IARC	International Agency for Research on Cancer.	
	AICS	Australian Inventory of Chemical Substances.	
	TWA	Time Weighted Average	
	STEL	Short Term Exposure Limit	
Literature References	List of Designated Hazardous Substances [NOHSC:10005(1999)]		
	Australian Code For The Transport Of Dangerous Goods By Road And Rail – Sixth Edition.		
	Standard for the Uniform Scheduling of Drugs and Poisons.		
	National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]		
	Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]		
	Material Safety Data Sheets – individual raw materials – Suppliers.		
	HSIS – Hazardous Substance Information System – National Worksafe Data Base.		
Revision Information	New Issue to standard : 2nd Edition [NOHSC:2011(2003)].		
Note	Safety Data Sheets are updated frequently. Please ensure that you have a current copy.		
Contact Point	Regulatory Affairs Manager.	Telephone	(02) 66228733
Issue Date	AUG 2007	Supersedes Issue Date	First issue
This MSDS summarizes at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since the supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier.			