MATERIAL SAFETY DATA SHEET

Hazardous according to criteria of Worksafe Australia

1 PRODUCT & COMPANY UNDERTAKING IDENTIFICATION

Product Name:	BLACK MAGIC
Major Recommended Use:	Heavy-duty alkaline degreaser
Company:	Auto Klene Solutions Pty Ltd
Address:	1/83 Merrindale Drive, Croydon, VIC, 3136
Telephone Number:	61 (03) 8761 1900
Fax Number:	61 (03) 8761 1955
Email:	sales@autoklene.com
Emergency Phone Number:	Poisons Information Centre 13 11 26

2 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Proportion
Sodium Hydroxide	1310-73-2	3.0%
2-Butoxyethanol	111-76-2	4.4%
Non ionic / anionic surfactant		1 – 10%
Soil suspending agents		1 – 10%
Dye		< 1%
Water		too 100%

3 HAZARDS IDENTIFICATION

Hazard Category:	Corrosive				
Causes burns (R34)	Irritating to eyes & Skin (R 36/38)				
UN Number:	**1719**	**HAZCHEM CODE:**	**2R**	**ADG CLASS:**	**8**
SUB RISK CLASS:	**NA**	**Packing Group:**	**III**	**SUSDP:**	**S5**

Signs and Symptoms of Exposure *(Acute effects)*:

Swallowed: Corrosive, May cause burns to mouth and gastrointestinal tract. May cause headache, nausea, vomiting and diarrhoea

Eye: Corrosive, Severe eye irritant. Contact with eyes can cause irritation and discomfort, and may cause conjunctivitis and corneal oedema when absorbed into the tissue of the eye from the atmosphere. Corneal oedema may give rise to a perception of blue haze or fog around lights. This effect is transient and has no known residual effect.

Skin: Severe irritant. Corrosive to skin. May cause skin burns. Prolonged or repeated skin contact may lead to dermatitis effects, due to the defatting nature of product.

Inhaled: Inhalation of mist may cause irritation to lungs. If aspirated into the lungs during swallowing or vomiting, may lead to chemical pneumonitis.

Chronic: Prolonged or repeated skin contact may lead to dermatitis effects.

4 FIRST AID MEASURES

NOTE: **All persons assisting with first aid should wear protective eyewear and rubber or nitrile gloves.**

Swallowed: Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. Rinse mouth thoroughly with cold water. DO NOT INDUCE VOMITING. Give a large quantity of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical attention immediately or Poisons Information Centre. Phone 131126

Eye: Immediately flush the contaminated eye(s) with lukewarm, gently flowing, water for 15 minutes, by the clock, holding the eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Continue irrigation with water. Obtain medical attention immediately.

Skin: Avoid contact with this chemical. Wear protective gloves such as nitrile or natural rubber. Immediately, flush contaminated area with lukewarm, gently running water for at least 5 minutes under running water remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Obtain medical attention immediately.

Inhaled: Using proper respiratory protection, immediately remove the affected victim from exposure to fresh air. If breathing is laboured and patient is cyanotic (blue), ensure airways are clear and have 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 advice.

First Aid Facilities: Eyewash fountains and safety showers should be available for emergency use. Protective gloves such as nitrile or rubber for use by first aid personnel, Facemask with one way valve and disposable filter. Chemical goggles.

Advice to Doctor: Treat symptomatically. Eyes: if cornea is burned instil antibiotic steroid preparation frequently and consult an ophthalmologist. May cause irritation to the lungs, anaesthetic or narcotic affect may occur. LD50 470mg/Kg for Ethylene glycol butyl ether i.e. Moderate single dose toxicity. Further information about the treatment of this type of product can be obtained for the National Poisons Information Centre 13 11 26.

5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Presents no known fire or explosive hazards and forms no known hazardous decomposition products. Treat fire for materials actually involved in the fire.

Special Exposure Hazards (fire fighting): May generate toxic, irritating or flammable combustion products. Sudden reaction with fire may result if product is mixed with an oxidising agent. May generate carbon monoxide gas. Personnel in vicinity and downwind should be evacuated.

Special Fire Fighting Procedures: Fire-fighters should wear butyl rubber boots, gloves, and body suit and a self contained breathing apparatus. Water spray should be used to cool intact drums. Prevent runoff from fire control entering waterways.

6 ACCIDENTAL RELEASE MEASURES

Precautions: Keep unnecessary people away; Isolate hazard area and deny entry. Stay upwind; Keep out of low areas. Shut off ignition sources, no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Water spray may reduce vapour; but it may not prevent ignition in closed spaces.

Methods for Cleaning Up:

SMALL SPILLS: Take up with sand, dirt or vermiculite. DO NOT use sawdust. Use non-sparking tools or HEPA vacuum system. Place into labelled drum(s) for later disposal.

LARGE SPILLS: Notify Emergency Services (Police or Fire Brigade). Tell them exact location, nature, hazards, quantities and any other information that would be helpful. Contain spill. Remove all ignition sources and safely stop flow of spill. Bund area. Wear full protective clothing. Avoid inhalation and skin or eye contact, collect material, and dissolve in a large amount of water. Carefully add soda ash and calcium hydroxide at intervals. Decant liquid after 24 hours and neutralise with 6M Hydrochloric acid. Discharge supernatant to drain with x1000 dilution of cold tap water. The sludge should be removed to land fill. Observe local regulations.

7 HANDLING & STORAGE

Handling: Avoid skin and eye contact and inhalation of vapours. Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour respirator meeting the requirements of AS 1715 and AS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or reuse.

Storage: This substance is classified as a Dangerous Good, Class 8, and PGIII. Protect storage containers from heat or direct sunlight. The storage area should have adequate, independent, ventilation and have no sources of heat or sparks. Fans or other electrical equipment should be spark resistant.
Not to be loaded with Class 1, 4.3, 5.1, 5.2, 7, Foodstuff and foodstuff empties.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards: Not established for product.

For Sodium Hydroxide -	TWA:	2.0mg/m^3	STEL: Peak limitation
For 2-Butoxyethanol -	TWA: 25ppm	121mg/m^3	STEL:

Engineering Controls: Maintain concentration below recommended exposure limit.
Conventional airflow is generally considered to be acceptable.

Hand Protection: Gloves- Nitrile or Natural rubber gloves which comply with AS2161. Check with equipment supplier to determine if level of protection is adequate.

Eye Protection: Splash proof eye goggles, Face shield or safety glasses

Body Protection: Standard issue work clothes safety shoes or boots - Plastic apron chemical resistant. If splashes are likely to occur, wear: long sleeve overall. Check with equipment supplier to determine if level of protection is adequate.

Respiratory Equipment: Avoid breathing of vapours/gases. Select and use respirators in accordance with AS/NZS 1715/1716. When vapours exceed the exposure standards then the use of a half face respirator with acid vapour cartridge is recommended. For high concentration use an atmosphere supplied, positive pressure demands self-contained or airline breathing apparatus, complying with the requirements of AS/NZS 1715 is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant.

Flammability: Not Flammable

9 PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Clear dark brown liquid.
Smell:	Slight Glycol odour
pH:	12.0 – 13.0
Boiling Point (@760mm Hg):	>100°C
Melting Point:	No data
Flashpoint (°C):	Not Flammable
Flammability:	Not Flammable
Explosive Limits:	Not Flammable
Vapour Pressure (mmHg @ 20°C):	No data
Vapour Density (Air =1):	No data
Solubility in Water:	Infinite
Specific Gravity:	1.04
Per cent Volatiles:	84 - 85%

10 STABILITY & REACTIVITY

Stability: This product is stable under normal storage conditions.
Conditions to Avoid: Heat, flames, ignition sources and incompatibles.
Incompatibility (Materials to Avoid): Reacts with strong oxidising agents/acids/alkalis/nitrates. Reaction with peroxides may result in violent decomposition.
Hazardous Decomposition Products: Avoid contact with alkalies, active metals, eg. aluminium, tin, zinc, magnesium, etc. which could generate hydrogen in explosive amount, Personnel in vicinity and downwind should be evacuated.
Hazardous Transformation Products: Will not occur.

11 TOXICOLOGICAL INFORMATION

No toxicological information is available for this product, however, for the ingredient:
For 2-Butoxyethanol: **Acute Oral Toxicity (LD50, rat):** LD50 470mg/Kg
Acute Dermal Toxicity (LD50, rabbit): No data.
Acute Inhalation Toxicity (LC50, rat): No data.

12 ECOLOGICAL INFORMATION

Ecotoxicity: No data for product. Sodium Hydroxide & 2-Butoxyethanol is toxic to fish and wildlife.
Environmental Fate: No environmental impact information is available for this product, however for Caustic solution it needs to be contained.

13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Wear protective clothing during disposal operations. If disposal by a waste contractor, make sure that he has sufficient information and that waste containers are properly labelled.

14 TRANSPORT INFORMATION

SHIPPING NAME: CAUSTIC ALKALINE LIQUID N.O.S.

Packing Group: III

Mode	Regulations	Class	Packaging Group	Notes
-	UN	1719	III	
Sea	IMDG	Class 8	III	Marine Pollutant
Road/Rail	ADG Code	Class 8	III	
Air	IATA/ICAO	Class 8	III	

Classified as a Class 8 alkali Corrosive Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 6th Edition.
Dangerous goods of Class 8 (Corrosive Liquid Alkali) are incompatible in a placard load with any of the following:

Class I
Class 4.3
Class 5.1
Class 5.2
Class 6, where the Class 6 substance is a cyanide and the Class 8 substance is an acid
Class 7

This material is a Scheduled Poison (S5) and must be stored, maintained and used in accordance with the relevant regulations.

15 REGULATORY INFORMATION

Hazardous according to criteria of Worksafe Australia
Hazard Category: Corrosive

RISK PHRASES

R26/27 Toxic by inhalation, in contact with skin and if swallowed
R 36/38 Irritating to eyes & Skin

SAFETY PHRASES

S (1/2) Keep locked up out of reach of children.
S7/9 Keep container tightly closed in a well, ventilated place.
S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.
S36/37/39 Wear suitable gloves and eye/face protection.

16 OTHER INFORMATION

TECHNICAL CONTACT:

This Safety Data Sheet has been written to comply with Directives 93/112/EEC and 88/379/EEC
Intended Use: As a heavy-duty alkaline degreaser