

ISSUE DATE: October 2003 REVISION DATE: June 2007

## MATERIAL SAFETY DATA SHEET

### Black Magic

#### COMPANY DETAILS

COMPANY NAME: ADM – Australian Dental Manufacturing  
ACN: 010 967 432

ADDRESS: 3 Papps Crt  
Redwood Park  
SA 5097

TELEPHONE: 08-82635585  
FAX: 08-82635598  
EMAIL: admchief PLEASE REMOVE ALL CAPITALS@PLEASE  
REMOVE ALL CAPITALSbigpond.net.au

**EMERGENCY TELEPHONE NUMBER: 131 126**

#### PRODUCT INFORMATION

PRODUCT NAME:	Black Magic
OTHER NAMES:	None
UN NUMBER:	1133
DANGEROUS GOODS CLASS:	3
SUB RISK CLASS:	Not Available
HAZCHEM CODE:	3[Y]E
POISON SCHEDULE:	S5
PRODUCT USE:	Polyether Tray Adhesive

<b>COMPOSITION</b>		
<b>Chemical Composition</b>	<b>CAS number</b>	<b>Proportion</b>
<b>HAZARDOUS INGREDIENTS:</b>		
Acetone	67-64-1	15 – 40%
N-Hexane	110-54-3	5 - 15%
Hexane Isomers	N/A	15 – 40%
Toluene	108-88-3	5 – 15%
Adhesive + Resin	N/A	Remainder

<b>PHYSICAL AND CHEMICAL DATA</b>	
<b>APPEARANCE:</b> <b>ODOUR:</b> <b>MELTING POINT:</b> <b>BOILING POINT:</b> <b>VAPOUR PRESSURE</b> <b>SPECIFIC GRAVITY:</b> <b>FLASH POINT:</b> <b>AUTO-IGNITION TEMPERATURE</b> <b>FLAMMABLE LIMITS</b>  <b>CORROSIVENESS:</b> <b>SOLUBILITY:</b> <b>MISCIBILITY:</b> <b>pH:</b>	Grey/Black Liquid Solvent odour Not Available Not Available 2.2kPa@15°C (toluene); 180mmHg@20°C <1 -17°C (Acetone) 225°C – based on N-hexane LEL: 2% UEL: 13% Not Corrosive Immiscible in Water Miscible in Water Not Relevant

<b>HEALTH HAZARDS IDENTIFICATION</b>
This Product is classified as hazardous according to criteria of NOHSC.

<b>ACUTE EFFECTS</b>	
INGESTION:	<ul style="list-style-type: none"> <li>Harmful if swallowed. May cause irritation to the mouth and gastro-intestinal tract. Early symptoms likely to be nausea, abdominal irritation, pain, vomiting, diarrhoea, headache, pulmonary irritation.</li> </ul>
EYE:	<ul style="list-style-type: none"> <li>May cause severe eye irritation with discomfort.</li> </ul>
SKIN:	<ul style="list-style-type: none"> <li>May cause skin irritation. Prolonged occupational exposure may lead to dermatitis.</li> </ul>
INHALED:	<ul style="list-style-type: none"> <li>Harmful if inhaled. Inhalation of high vapour concentrations may cause dizziness, headache, nausea, anaesthetic effects, central nervous system depression, peripheral neuropathy (numbness in limbs). Prolonged exposure to vapours may cause loss of consciousness and death.</li> </ul>
CHRONIC EFFECTS:	<ul style="list-style-type: none"> <li>The substance is toxic to kidneys, liver, lungs, and the nervous system. Repeated or prolonged inhalation of vapours may lead to chronic respiratory irritation. Repeated or prolonged exposure to the product ingredients can produce target organs damage. Chronic overexposure may cause arrhythmia's (heart beat irregularity) and peripheral nervous system effects. Prolonged skin contact may cause dermatitis with drying or cracking of the skin.</li> </ul>
OVEREXPOSURE:	<ul style="list-style-type: none"> <li>Inflammation of the eye is characterized by redness, watering, and itching.</li> <li>Skin inflammation is characterized by itching, scaling, reddening. Inhalation of vapours may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation.</li> </ul>

<b>FIRST AID</b>	
INGESTION:	<ul style="list-style-type: none"> <li>If swallowed, immediately give copious quantities of water.</li> <li>Do not induce vomiting. If vomiting occurs, ensure persons airway is clear and breathing of liquid/foam does not occur. Never give anything by mouth to an unconscious person. Call a Physician if symptoms persist.</li> </ul>
EYE:	<ul style="list-style-type: none"> <li>Irrigate the eye with copious amounts of water for 15 minutes keeping eyelids open. Seek medical assistance if</li> </ul>

SKIN:	<p>symptoms persist.</p> <ul style="list-style-type: none"> <li>Remove contaminated clothing immediately.</li> <li>Wash skin with large amounts of soap and water until no evidence of product remains, at least 15 minutes. Wash clothing before re-use. If irritation or pain persists – seek medical attention.</li> </ul>
INHALED:	<ul style="list-style-type: none"> <li>If inhaled, immediately remove to fresh air until fully recovered. Monitor for respiratory distress. If not breathing, give artificial respiration. If breathing is difficult, give oxygen if qualified to do so.</li> <li>Call a Physician.</li> </ul>

**SCHEDULED POISONS: This Product is a Scheduled Poison.**

EXPOSURE CONTROLS/PERSONAL PROTECTION			
<p>In accordance with the criteria of NOHSC this Product is classified as hazardous. No exposure limits are assigned for this specific material by the NOHSC. However the product contains a number of volatile ingredients. Their exposure limits are:</p>			
Name of volatile chemical	CAS No.	Proportion	Exposure Limits
Acetone	67-64-1	15-40%	TWA: 500ppm; STEL: 1000ppm {1997}; ACGIH (TLV): CEIL 1000ppm [1989}
N-Hexane	110-54-3	5-15%	TWA: 176 mg/m <sup>3</sup> ; 50ppm ACGIH (TLV) STEL: 1000ppm; TWA: 200ppm DFG MAK's
Hexane Isomers	N/A	15-40%	TWA: 1760 mg/m <sup>3</sup> ; CEIL: 3500mg/m <sup>3</sup> ACGIH (TLV) TWA: 500ppm; STEL: 1000ppm ACGIH (TLV); TWA 200ppm DFG MAK's
Toluene	108-88-3	5-15%	TWA: 100ppm; STEL: 150ppm OSHA(PEL) & NIOSH TWA: 50ppm ACGIH (TLV)
<p><u>Engineering Controls/Personal Protection</u></p> <p>Good work practices can help reduce hazardous exposures and are better than personal protective equipment. It is recommended to provide local exhaust ventilation at the site of chemical release. Using respirators or protective equipment is less effective however if necessary use an approved respirator complying to AS 1716 and used in accordance with AS 1715.</p> <p>Avoid skin contact wear solvent resistant gloves and clothing. Wear splash proof chemical goggles or face shield.</p>			



## HANDLING & STORAGE

- Product to be handled only by qualified staff in dental offices/laboratories.
- See product instructions for safe use
- Store in a cool well ventilated place out of direct sunlight.
- Store away from strong oxidizing agents and acids.
- Store below 25°C keep away from sources of heat; do not drop.
- Protect containers from physical damage, check regularly for leaks.
- Avoid contact with skins and eyes.
- Avoid breathing vapours
- Do not store together with food.
- Comply with the current issue of the Australian Code for the Transportation of Dangerous Goods by Road and Rail and with the relevant Dangerous Goods Legislation in each State or Territory.

### Risk Phrases

R10: Flammable

R26: Harmful by inhalation

R36: Irritating to eyes

R38: Irritating to skin

### Safety Phrases

S2: Keep out of reach of children

S16: Keep away from sources of ignition – no smoking

S23: Do not breath gas/fumes/vapour/spray

S23/24/25: Avoid contact with skin and eyes and breathing vapours

S29 Do not empty into drains

S33 Take precautionary measures against static discharges

S38 In case of insufficient ventilation, wear suitable respiratory equipment.

## STABILITY & REACTIVITY

REACTIVITY:	Stable at normal temperatures and pressure.
CONDITIONS TO AVOID:	Avoid contact with incompatible materials.
INCOMPATIBLES:	Flammable in the presence of reducing agents and oxidizing agents. Avoid contact with strong oxidisers such as Chlorine, Fluorine, Bromine because violent reactions occur. The Toluene component may react violently with strong oxidizing acids such as Sulphuric and Nitric Acids.

## TOXICOLOGICAL INFORMATION

**SYMPTOMS:** No adverse health effects are expected if this product is handled in accordance with this Material Safety Data Sheet and the Product label/instructions.

If the product is spilled or mishandled, the following symptoms may occur:

### Short Term Acute Effects:

**INGESTION:** Irritation to the mouth and gastro-intestinal tract. Nausea, abdominal irritation, pain vomiting, diarrhea and headache.

**EYE CONTENT:** Eye irritation with discomfort.

**SKIN CONTACT:** May cause irritation, prolonged use may cause dermatitis.

**INHALATION:** Inhalation of high vapour concentrations may cause dizziness, headache, nausea, anaesthetic effects, central nervous system depression, peripheral neuropathy (numbness in limbs). Prolonged exposure to vapours may cause loss of consciousness and death.

### Long Term Effects:

No specific data is available for this product however the following information on the ingredients are presented.

#### Toluene

Oral LD50 (Rat)	2,600mg/kg
Skin (Rabbit)	12,200 mg/kg
Inhalation (Mouse)	7523 ppm (4 hours)

Long term occupational skin exposure to Toluene and Hexane has reportedly caused dermatitis and cracking of the skin.

It may cause damage to the developing fetus. Toluene should be handled as a Teratogen with extreme caution. Repeated exposure is toxic to blood, kidneys, lungs, liver, the nervous system, upper respiratory tract, skin. N-hexane is a neurotoxin.

No other long term effects have been reported for the other ingredients.

## ECOLOGICAL INFORMATION

- Spillages from the small packaging of this product are unlikely to penetrate soils. The solvents used in this product are volatile and will partition to the atmosphere.
- The adhesive component will harden quickly and remain inert with no water-soluble material to leach into the environment.
- Unlikely to cause long term adverse effects in the environment. This material is not expected to bioaccumulate.
- As it is likely to vaporize quickly it is unlikely to reach waterways to cause long-term effect to the aquatic environment. No specific toxicity data to aquatic organisms is available for this product.
- The ingredients are completely biodegradable.
- No long-term persistent effects are expected.

### DISPOSAL CONSIDERATIONS

Dispose spill material in accordance with Local Waste Disposal Authority.  
Dispose containers thoughtfully to landfill.

### TRANSPORT INFORMATION

Classified as a highly flammable liquid gas for transport (ADG, UN, IATA)

UN Number:	1133
DANGEROUS GOODS CLASS:	3
PACKAGING GROUP	II
SUB RISK CLASS:	Nil
HAZCHEM CODE:	3[Y]E

Product is not regulated for shipping. No special storage or transport requirements are necessary.

### REGULATORY INFORMATION

From information available, this Product is not classified according to the criteria of NOHSC.

### CONTACT POINT

CONTACT:	Business Hours:	08 82635585
	Mobile:	0419665074
	Emergency	131 126

This MSDS summarises our best knowledge of the health and safety hazard information of this Product and how to safely handle and use the product in the workplace.

Each user should read this MSDS and consider the information in the context of how the Product will be handled and used in the workplace including its use in conjunction with other products. If clarification of any term in this MSDS or further information is required to ensure safe use of this Product can be made the user should contact ADM – Australian Dental Manufacturing

## **OTHER INFORMATION**

This MSDS is prepared in accordance with the document “National Code of Practice for the Preparation of Material Safety Data Sheets”, 1994, Worksafe Australia.

Contact Points:

Australia

Police & Fire:

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National Poisons Information Centre:

131126 (anywhere in Australia)

**READ LABEL CAREFULLY BEFORE USING PRODUCT**