

**METHANOL  
LOCAL SALES SPECIFICATION**

**1. DESCRIPTION**

Methyl Alcohol, CH <sub>3</sub> OH	
<b>Product Name</b>	Methanol
<b>Commercial Product Name</b>	Methanol Methyl Alcohol
<b>Synonyms</b>	Methyl Alcohol, Methanol Wood Alcohol

**2. COMPOSITION OF INGREDIENTS**

<b><u>SPECIFICATION</u></b>			
<b>PROPERTIES</b>	<b>UNITS</b>	<b>LIMITS</b>	<b>TEST METHOD</b>
Methanol	Mass %	99,0 min (dry basis)	GC
Appearance	-	Clear, colourless and free from suspended matter.	VISUAL
Colour	Hazen	15 max	ASTM D1209
Density @ 20°C	Kg/l	0,791 – 0,793	ASTM D1298
Distillation Range @ 101,3kPa	-	Not less than 95% (v/v) shall distil between 64,5°C and 65,5°C	ASTM D1078
Residue on evaporation	Mg/kg	10 max	ASTM D1353
Water miscibility	Visual	No opalescence when mixed 5 parts Methanol: 95 parts distilled water	ASTM D1722
Acidity as Formic Acid	Mg/kg	20 max	ASTM D1613
Alkalinity	-	Neutral to phenolphthalein	
Aldehydes and Ketones	Mass %	0,04 max	GC

Sulphur and its compounds as S	Mg/kg	10 max	SCI 1.211/92
Water	Mass %	0,15 max	ASTM D1364

**Uses:** A solvent in the following applications: adhesives, paint strippers, lacquers, lacquer thinners, industrial detergents, Also used as a raw material for the manufacture of formald

### 3. HAZARDS IDENTIFICATION

#### Identification of the risks

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

#### Particular risks to human beings and the environment

Highly flammable.

### SPECIAL PROTECTION DATA

Ventilation requirements	Area must be well ventilated
Respiratory (in detail)	Air supplied respirator for high concentrations
Eyes	Safety goggles
Gloves	Rubber gloves

### 4. FIRST AID

#### HEALTH HAZARD INFORMATION

Emergency overview: clear liquid corrosive to skin and mucous membranes  
Medical conditions aggravated by exposure: dermatitis, existing respiratory disease  
and existing liver and kidney disease.

Causes	Symptoms	Emergency and first aid procedures
<b>Inhalation (Breathing)</b>	High vapour concentrations may be irritating to the eyes, nose and respiratory tract. May cause headaches, dizziness and nausea. Use with adequate ventilation. Repeated inhalation may cause lung damage. Irritating to mucous membranes and acts as an anaesthetic in	If patient is overcome, remove to fresh air and call a physician. Administer artificial respiration if breathing is irregular or has stopped. Note : do not use mouth to mouth. Use a pocket mask with a one way valve.

	very high concentrations.	
<b>Skin Contact / Absorption</b>	May cause skin irritation and/or dermatitis. Prolonged excessive contact causes defatting and drying out of the skin.	Remove and isolate contaminated clothing and shoes. Avoid spreading material on unaffected skin. Wash well with soap and water. Keep warm and quiet.
<b>Eye Contact</b>	Contact will cause irritation and/or burns. Irritation to eye caused at concentrations greater than 500 ppm.	Flush thoroughly with water for at least 15 minutes, within 1 minute of contact. Hold eyelids open while washing. In severe cases, obtain medical attention.
<b>Ingestion (Swallow)</b>	May cause pulmonary damage or chemical pneumonitis, if aspirated into the lungs. Toxic if swallowed.	If victim is still conscious and not having convulsions, induce vomiting and obtain medical attention promptly. Administer vegetable oil.
<b>Carcinogenicity</b>	NTP – not listed IARC – not listed OSHA – not listed	
<b>Acute over-exposure</b>	If present in high concentrations, vapours cause moderate irritation of eyes and respiratory systems. Effect is temporary.	

### 5. FIRE FIGHTING MEASURES

Carbon dioxide, foam and dry chemical.

Fire involving Tanks or Bulk Containers: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. ALWAYS stay away from the ends of tanks.

Cool containers with flooding quantities of water until well after fire is out.

Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Isolate spill or leak area immediately for at least 25 to 50 metres (80 to 160 feet) in all directions.

Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate enclosed areas.

Wear positive pressure self-contained breathing apparatus (SCBA).

Wear chemical protective clothing, which is specifically recommended by the manufacturer.

Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

If ROAD OR RAIL TANKER is involved in a fire, ISOLATE for 800 metres (1/2 mile) in all directions, also, consider initial evacuation for 800 metres (1/2 mile) in all directions.

### 6. HANDLING AND STORAGE

Store between 0 and 28°C.

Keep out of direct sunlight.

Empty containers may retain hazardous residue and explosive vapours.

Keep away from heat, sparks or flame.

Do not cut, puncture, or weld on or near this container.

Follow label warnings until container is thoroughly cleaned or destroyed.

## **7. ACCIDENTAL RELEASE MEASURES**

### **PRECAUTIONS:**

Absorb with fire retardant treated sawdust, diatomaceous earth etc. Shovel up and dispose at an appropriate waste disposal facility.

Restrict access to area.

Provide adequate protective equipment and ventilation.

Remove sources of heat and flame.

Notify occupational and environmental authorities.

### **SPILL OR LEAK:**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**DO NOT GET WATER INSIDE CONTAINERS**

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Occupational Exposure Limits NO EXPOSURE LIMITS ESTABLISHED

### Controls

The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside. Supply sufficient replacement air to make up for air removed. Have a safety shower/eye wash fountain readily available in the immediate work area.

### Personal Protection

If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment, including chemical safety goggles & face shield, boots, imperious gloves, coveralls, & respiratory protection.

Have appropriate equipment available for use in emergencies.

## **B & R PRODUCTS (PTY) LTD**

19 Beryllium Rd, Alrode Ext 7, Alberton  
Tel: 011 864-1301 /1302 /1036 /1393  
Fax: 027 11 864-1390  
P.O. Box 1633, Randburg, 2125, South Africa

Reg. No. 80/09849/07  
Email: bandr@icon.co.za  
Web: www.bandr.co.za

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

Clear liquid.

Specific gravity (20°C)	0.816
Solubility in water	Not soluble
Flash point °C (TCC)	<10
Solvent type, %	Active 15.7 Latent 12.3 Dilvent 72.0

### **10. STABILITY AND REACTIVITY**

Conditions to Avoid                      Stable but corrosive

### **11. TOXICOLOGICAL INFORMATION**

TOXIC : inhalation, ingestion, or skin contact with material may cause severe injury or death.  
Contact with molten substance may cause severe burns to skin and eyes.  
Effects of contact or inhalation may be delayed.

### **12. ECOLOGICAL INFORMATION**

No ecological problems are expected when the product is handled and used with due care.

### **13. DISPOSAL CONSIDERATIONS**

Disposal Method Product                      Disposal in accordance with local legal provisions. Disposal recommendations apply to the original material and its container and not to any materials which are a waste by-product of the user's operation. Chemical residues generally count as special waste.  
The disposal of the latter is regulated through corresponding laws and regulations. We recommend that you contact the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

### **14. TRANSPORT INFORMATION**

<u>UN No</u>	1230	<u>Hazchem Code</u>	2x
<u>ERG No</u>	153	<u>EAC</u>	60
<u>IMDG Code</u>	3	<u>IMDG-Packaging Group</u>	11
<u>Marine Pollutant</u>	Yes		
<u>Class</u>	Class: 3	Flammable: II	
<u>Subsidiary Risks</u>	None		

Tremcard Number \*\*\*\*

### **15. REGULATORY INFORMATION**

Risk Phrases Causes severe burns  
Safety Phrases Keep out of reach of children.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

### **16. OTHER INFORMATION**

Reason for Alteration: New Product

### **MANUFACTURERS NOTE**

Although the information contained herein is presented in good faith and is to the best of B&R Products knowledge true and accurate, it is made for informational purposes only and without any warranty whatsoever. Due to the special nature of the product and its applications B&R Products does not accept any responsibility or liability whatsoever which may result from the use of this information.

The information contained herein is not to be construed as a licence to operate under, or a recommendation to infringe, any existing patents, nor should it be confused with any Governmental or international safety codes.

<b>HEALTH HAZARD INFORMATION</b>		
<b>Causes</b>	<b>Symptoms</b>	<b>Emergency and first aid procedures</b>
<b>Inhalation (Breathing)</b>	Coughing, headache, nausea, drunkenness, blurred vision. Massive exposures can cause unconsciousness, blindness and death.	Move victim to fresh air. If breathing has stopped, administer artificial respiration. Obtain medical attention immediately.
<b>Skin Contact / Absorption</b>	May be absorbed through skin in toxic amounts.	As quickly as possible, flush affected area with water for 20 minutes.
<b>Eye Contact</b>	Vapour can irritate the eyes.	Immediately flush the contaminated eye(s) with water. Obtain medical attention.
<b>Ingestion (Swallow)</b>	Initial symptoms may resemble ethanol intoxication; may be accompanied by severe upper abdominal pain, visual disturbance often pertinent to blindness, prolonged coma, death.	Do not induce vomiting. Have victim drink 240 to 300ml water. Obtain medical attention immediately.
<b>Acute over-exposure</b>	Usually an oral dose of 25-100ml is fatal. After latent period of 10 – 15 hours	

## B & R PRODUCTS (PTY) LTD

19 Beryllium Rd, Alrode Ext 7, Alberton  
Tel: 011 864-1301 /1302 /1036 /1393  
Fax: 027 11 864-1390  
P.O. Box 1633, Randburg, 2125, South Africa

Reg. No. 80/09849/07  
Email: bandr@icon.co.za  
Web: www.bandr.co.za

	damage to central nervous system causes permanent blindness or death.	
<b>Chronic over-exposure</b>	Chronic over-exposure to 1200-8300 ppm can lead to impaired vision.	

HAZARDOUS COMPONENTS			REACTIVITY DATA	
<b>Components</b>	<b>%</b>	<b>Hazard Data</b>	<b>Conditions contributing to instability</b>	Strong oxidizing agents
Methanol	99	TLV = 200 ppm	<b>Incompatibility</b>	None
			<b>Hazardous decomposition products</b>	None
			<b>Conditions contributing to hazardous polymerization</b>	None
SPECIAL PROTECTION DATA			SPILL OR LEAK PROCEDURES	
<b>Ventilation requirements</b>	Area must be well ventilated.		<b>Steps to be taken if material is released or spilled:</b>	Not pertinent
<b>Respiratory (in detail)</b>	Air supply respirator for high concentrations		<b>Neutralising chemicals</b>	
<b>Eyes</b>	Safety goggles.		<b>Waste disposal method</b>	
<b>Gloves</b>	Rubber gloves.			
			Mop up with plenty of water. Prevent material from entering sewers or confined spaces. If necessary, contain spill by diking with sand or other suitable method. Ventilate area well to evaporate remaining liquid and dispel vapour.	
FIRE AND EXPLOSION DATA			PHYSICAL DATA	
<b>Flash Point (Test method)</b>	12°C (Closed cup)		<b>Boiling Point (at 760mm Hg)</b>	65°C
<b>Auto-ignition</b>			<b>Melting Point (pour pt)</b>	-97.8°C

## B & R PRODUCTS (PTY) LTD

19 Beryllium Rd, Alrode Ext 7, Alberton  
 Tel: 011 864-1301 /1302 /1036 /1393  
 Fax: 027 11 864-1390  
 P.O. Box 1633, Randburg, 2125, South Africa

Reg. No. 80/09849/07  
 Email: bandr@icon.co.za  
 Web: www.bandr.co.za

<b>temperature</b>	385°C	<b>Density (temperature)</b>	0.792 kg/litre
<b>Flammable limits in air % by Vol</b>	Lower: 7.3% Upper: 36%	<b>Vapour pressure (at 21.2°C)</b>	100mm Hg
<b>Extinguishing Media</b>	Alcohol foam, CO2, dry chemical.	<b>Vapour density (Air=1)</b>	1.1
<b>Special fire fighting procedures</b>	None.	<b>Solubility in H2O (% by mass)</b>	Highly soluble in water
<b>Unusual fire and explosion hazards</b>	Dangerous, when exposed to heat or flame.	<b>Evaporation rate (n-Butyl Acetate = 1)</b>	2.1
		<b>Appearance and odour</b>	Clear, colourless, mobile liquid. Slight alcoholic odour.

### Manufacturers note:

Although the information contained herein is presented in good faith and is to the best of B&R Products knowledge true and accurate, it is made for informational purposes only and without any warranty whatsoever. Due to the special nature of the product and its applications, B&R Products does not accept any responsibility or liability whatsoever which may result from the use of this information.

The information contained herein is not to be construed as a licence to operate under, or a recommendation to infringe, any existing patents, nor should it be confused with any Governmental or international safety codes.

