

MATERIAL SAFETY DATA SHEET REFERENCE MATERIAL NML-ORG-0001

May 2007

MANUFACTURER INFORMATION/ INFORMATION ON INGREDIENTS

Manufacturer:
Chemical Metrology
National Metrology Institute of South Africa (NMISA)
P/ Bag X34, Lynnwood Ridge, 0040

Telephone number: +27 12 841 4078
Fax number: +27 12 841 2131

These solutions are intended for the calibration of instruments and techniques used for the determination of ethanol in breath or blood. They consist of **at least 99.5% water** with less than 0.5% of ethanol.

HAZARDS IDENTIFICATION

The product consists of at least **99.5% water** with a small percentage of ethanol (less than 0.5%) packed in amber glass bottles. At this concentration, the solutions are **non-flammable and non-explosive**. The properties of the solution are mainly those of water.

Main hazards None

Other hazards Not intended for human consumption

FIRST AID MEASURES (SYMPTOMS)

Skin contact	There may be mild irritation at the site of contact
Eye contact	There may be irritation and redness
Ingestion	There may be irritation of the throat
Inhalation	There may be irritation of the nose and throat

FIRST AID MEASURES (ACTION)

Skin contact	Wash with soap and plenty of water
Eye contact	Bathe the eye with running water for 15 minutes
Ingestion	Wash out mouth with water

FIRE FIGHTING MEASURES

Extinguishing media	Suitable extinguishing media for the surrounding fire should be used
Exposure hazards	Does not emit toxic fumes
Protection of fire fighters	Suitable protection for the surrounding fire should be used

ACCIDENTAL RELEASE MEASURES

Personal precautions	See exposure controls/ personal protection. Turn leaking containers leak-side up to prevent escape of liquid
Environmental precautions	Contain the spillage with sand or earth. Not expected to cause problems to the environment
Clean-up procedures	Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method

HANDLING AND STORAGE

Handling	Do not smoke. Avoid the formations of mists in air
Storage	Store in a cool area. Keep container tightly closed. When used as a CRM, the produced should be stored between 4°C and 10°C to avoid change of composition
Packaging	Keep in original packaging

EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respiratory protection	Not required
Hand protection	Protective gloves
Eye protection	Safety glasses. Ensure eye bath is at hand
Skin protection	Protective clothing

PHYSICAL AND CHEMICAL PROPERTIES

State	Liquid
Colour	Colourless
Oxidising	Non-oxidising
Soluble in water	Miscible with water in all proportions
Boiling point, °C	100
Melting point	n/a
Danger of explosion	Not explosive
Self-ignitability	Not self-igniting

STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Hazardous decomposition products	None
Hazardous polymerization	Will not occur
Conditions to avoid	Heat (to prevent evaporation and change in composition)

TOXICOLOGY

Routes of exposure	See above
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ECOLOGICAL INFORMATION

Mobility	Readily absorbed into soil
Persistence and degradability	Biodegradable
Bioaccumulative potential	No data available
Other adverse effects	Negligible ecotoxicity

DISPOSAL CONSIDERATIONS

Disposal operations	See accidental release measures. Consult regional or national regulations regarding disposal
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TRANSPORT INFORMATION

ADR/ RID	
UN no	None
Shipping name	Not subject to ADR
IMDG/ IMO	
UN no	None
IATA/ ICAO	
UN no	None

REGULATORY INFORMATION

Hazardous symbols	None
Risk phases	None
Safety phases	Not classified as dangerous for supply

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