MATERIAL SAFETY DATA SHEET

Section 1. **Product and Supplier Identification**

Product Name : **EKOFIX PRESERVATION SOLUTION**

Other Names :

Use :

Supplier : Eko Solutions

Address : 5 Maddison Court
P.O. Box 4047, Bundaberg Sth Qld, 4670

Telephone : 07 4154 2921
Fax : 07 4154 2933
Emergency : 0417 720 832

Section 2. **Hazard Identification**

Hazard Statement This product is classified as **Hazardous** according to the criteria of Workplace Australia

Product is classed as a Dangerous Good within the definition of the Australian Dangerous Goods Code.

UN 1219 DG CLASS 3 PKG GRP II HAZ 2[Y]E
CONTAINS ISOPROPANOL

Risk Phrases : R11 R22 R66
Highly Flammable. Harmful if swallowed. Repeated exposure may cause skin dryness or cracking.

Safety Phrases: S2 S16 S23 S24 S40 S35 S62
Keep Out of Reach of Children. Keep away from sources of ignition - no smoking.
Do not breathe gas/fumes/vapour/spray. Avoid contact with skin.
To clean the floor and all objects contaminated by this material use water
This material and its container must be disposed of in a safe way. If swallowed, do not induce vomiting: seek medi cal advice immediately and show this container or label.

Section 3. **Composition / Information on Ingredients**

This composition is classed as a **mixture** of the following ingredients :

Component Name	CAS #	%
Isopropanol	67-63-0	>60
Other non-hazardous ingredients		To 100%

Section 4. First Aid Measures

SWALLOWED
Rinse mouth out with plenty of water. If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, **DO NOT** induce vomiting. Give a glass of water.

EYE
If this product comes in contact with the eyes:
Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN
If product comes in contact with the skin, Wash affected areas thoroughly with water.
Seek medical attention in event of irritation.

INHALED
If fumes or combustion products are inhaled: Remove to fresh air.
Lay patient down. Keep warm and rested. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Transport to hospital, or doctor.

ADVICE TO DOCTOR

Visible effects are similar to other lower primary alcohols (eg ethanol). Patient may suffer CNS depression, nausea, dizziness, drowsiness, loss of corordination and fatigue. High concentrations may cause light-headedness, giddiness, shortness of breath, confusion, and may lead to narcosis, cardiac irregularities, unconsciousness or even death.

Section 5. Firefighting Measures

Product is highly flammable.

If product has breached packaging, use of alcohol resistant foam is encouraged, otherwise dilute with fog or water jet. Product / packaging should be cooled via the use of fog, water jet or foam.

Section 6. Accidental Release Measures

MINOR SPILLS

Product is flammable. Ensure all ignition sources are removed. Clean up all spills immediately. Avoid contact with skin.

MAJOR SPILLS

Product is flammable. Ensure all ignition sources are removed. Contain / Control Product by use of absorbent bunds. Absorb excess product onto suitable biodegradable absorbent and dispose of via bioremediation or fixation. DO NOT discharge a major spill to drains.

NOTIFICATION PROCEDURES FOR SPILLS

Report Spills as required to appropriate authorities such as Local Environmental Health Officer, EPA or Fire Brigade. If spills are likely to enter any drain, waterway or groundwater, contact the Area Water Authority. In case of accident or road spill, contact the Police and Fire Brigade and, if appropriate, EPA or Area Water Authority.

Section 7. Handling and Storage

SUITABLE CONTAINER
Plastic pail, Polyliner drum
Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY
DO NOT use aluminium, galvanised or tin-plated containers.

STORAGE REQUIREMENT
Store in original containers. Keep containers securely sealed when not in use. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storing and handling recommendations.

Section 8. Exposure Controls / Personal Protection

ENGINEERING CONTROLS

None required when handling small quantities. OTHERWISE: Use in a well ventilated area. General exhaust is adequate under normal operating conditions.

PERSONAL PROTECTION

EYE
When handling concentrate— safety glasses with side shields. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

HANDS/FEET
Avoid skin contact with concentrate as solvent properties may lead to defatting of skin. Polyethylene gloves or PVC gloves or Rubber Gloves. Safety footwear.

OTHER
General clothing (long sleeve / long pants) will provide adequate protection - or Rubber apron or Plastic apron. Ensure that there is ready access to eye wash unit. Ensure there is ready access to an emergency shower.

Section 9. Physical and Chemical Properties

Physical State:	Liquid
Colour:	Clear water white - yellow
Odour:	Characteristic, sharp, sweet odour of almonds
Odour Threshold (ppm):	n/d
pH:	n/a
Boiling Point (°C):	8C° (sustained)
Melting Point (°C):	n/d (< 0°C)
Flash Point (°C):	12°C
Flammability:	flammable
Auto Flammability:	n/d
Explosive Properties:	LEL 2.0% UEL 12.0%
Oxidizing Properties:	n/a
Vapour Pressure(kPa):	n/d
Vapour Density:	2.1 (air = 1)
Specific Gravity:	0.786
Evaporation Rate:	n/d
Solubility in Water:	Miscible - with partial separation
Partition Coefficient:	n/a
Viscosity @ 40 °C, cSt:	n/d
Viscosity @ 100 °C, cSt:	n/d
Pour Point (°C):	n/d

Note: **n/a = not applicable** **n/d = not determined**

For further technical information please contact Eko Solutions Technical group.

Section 10. Stability and Reactivity

Stability (Thermal, Light, Etc)	Stable
Conditions to Avoid	Heat, flames
Incompatible with	Oxidising agents
Decomposition Products	Limited evolution of carbon dioxide
Self-Polymerisation	Does not occur

Section 11. Toxicological Information

Acute Health Effects

Most likely expose routes for damage are by inhalation or ingestion.

Visible effects are similar to other lower primary alcohols (eg ethanol). Patient may suffer CNS depression, nausea, dizziness, drowsiness, loss of corordination and fatigue. High concentrations may cause light-headedness, giddiness, shortness of breath, confusion, and may lead to narcosis, cardiac irregularities, unconsciousness or even death.

Toxicity will require monitoring of blood chemistry by appropriately trained toxicologist. Ensure that toxicologist is made aware of the presence of isopropanol in the product.

Eye contact requires immediate medical attention. Presence of concentrated alcohols may lead to localised irritation to the outer layer of the eye due to defatting.

Skin contact will usually produce no symptoms, except in individuals showing prior chemical sensitisation or dermatitis. Treatment in these cases will require medical attention.

Chronic Health Effects

Chronic inhalation of alcohol vapours may lead to long term liver, kidney and CNS damage.

Section 12. Ecological Information

Ecological fate of mixture has not been determined.

Biodegradability rates of component parts suggest product to be readily biodegradable after dilution as defined in Australian Standards with > 90% biodegradable within 28 days.

Overall level of inorganic phosphates = nil.

Other components have little, if any, environmental impact at normal dilution rates.

Product contains > 90% VOC components.

Section 13. Disposal Considerations

Product should be disposed of according to local government guidelines.

Disposal of small amounts of concentrate is most easily achieved by dilution and discharge to the local sewerage treatment system. Disposal of larger amounts may require that the product be passed on to a competent chemical waste disposal authority or contractor.

Product should never be disposed of into natural watercourses or stormwater systems or directly to the environment without appropriate treatment.

Section 14. Transport Information

Product is classed as a Dangerous Good within the definition of the Australian Dangerous Goods Code.

Product is HAZARDOUS.

UN 1219
DG CLASS 3
PKG GRP II
HAZ 2[Y]E

CORRECT SHIPPING NAME : ISOPROPANOL

Section 15. Regulatory Information

All components utilised in this formulation are registered with the relevant Australian Government agencies (NICNAS, NIOSH, AICS).

Section 16. Other Information

This MSDS was last reviewed on: 21 August 2006

Date for next mandatory review : 21 August 2011

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Disclaimer

This MSDS follows the NOHSC:2011(2003) National Code of Practice for the Preparation of Material Safety Data Sheets (2nd ed).

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End of MSDS