SAFETY DATA SHEET

Section 1: Identification of the Substance/Mixture and of the Supplier

Product Name: Isopropyl Alcohol

Proper Shipping Name

Recommended use:

Company Details Biosymph Ltd

Address: 2287 Kakaramea Road

Hamilton, New Zealand

Telephone: +64 7 829 8606 [8.00 am to

4.30pm – Monday to Friday

+64 274 736008(24 hours) **Emergency Telephone:**

National Poison Centre(24 hours):

0800 POISON [764 766]

Date of preparation 22 September 2017

Section 2: Hazard Identification



DANGER:

- Highly flammable liquid and vapour.
- May be harmful if swallowed.
- Causes mild skin irritation.
- Causes eve irritation.

HSNO Approval Number: Group Standard HSR001180.

HSNO Classes: 3.1B, 6.1E(oral), 6.3B, 6.4A

Prevention Statements:

- Read label before use.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting, explosive-proof equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/eye protection.
- Wash hands thoroughly after handling.

Response Statements

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- In case of fire: Use dry chemical powder or carbon di-oxide for extinction
- If medical advice is needed, have product container or label at hand.
- If skin irritation occurs: Get medical advice/ attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Storage Statements

Store in a well-ventilated place. Keep cool.

Section 3: Composition/Information on Ingredients

Name % by Wt. CAS Number

Isopropyl Alcohol 100 67-63-0

Section 4: First Aid Measures

Eyes: If medical advice is needed, have product container or label at hand.

Immediately call a POISON CENTER or doctor/physician. Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Skin: Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON

CENTER or doctor/physician.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for

breathing.

For Further Information Telephone (24 Hours) The National Poison Centre: 0800 Poison [764 766]

Section 5: Fire Fighting Measures

Flash Point: 12°C Auto ignition Temperature: 399°C

Flammable Limits in Air %

by Volume:

LFL: 1.8% UFL: 12.0%

Extinguishing Media: Dry chemical or carbon dioxide

Fire Fighting Instructions: Alert Fire Bridge (111); advise location and nature of hazard. Wear

breathing apparatus and protective gloves. Shut off product that may "fuel" a fire if safe to do so. If safe, switch off electrical equipment until vapour hazard removed. Allow trained personnel to attend a fire in progress, providing fire-fighters with this Safety Data Sheet. Prevent product and extinguishing media from escaping to drains and waterways.

Unusual Fire and Explosion

Hazards:

Carbon monoxide

Hazchem code 2YE

Section 6: Accidental Release Measures

Minor spills

- Remove or eliminate all ignition sources.
- Clean up spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Wear personal protective equipment.
- Contain and absorb small quantifies with vermiculite or other absorbent material.
- Collect residues and waste material in a labelled container suitable for flammables.
- Seal container and dispose of safely.

Section 7: Handling And Storage

PROCEDURE FOR HANDLING

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

SUITABLE CONTAINER

- DO NOT use aluminium or galvanised containers.
- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.

STORAGE REQUIREMENTS

- Store in original containers in approved flame-proof area.
- No smoking, naked lights, heat or ignition sources.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- Keep containers securely sealed.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: General (mechanical) room ventilation is considered satisfactory in

enclosed spaces.

Eye / Face Protection: Where there is potential for eye contact, wear a face shield, chemical

goggles, and have eye flushing equipment immediately available.

Body Protection: PVC-coated gloves. Avoid skin contact. If skin contact or contamination

of clothing is likely, protective clothing should be worn.

Respiratory Protection: Avoid breathing vapour or mist. Use NIOSH approved respiratory

protection equipment appropriate to the material

Exposure Limits: Not available

Section 9: Physical And Chemical Properties

Appearance Clear water white

Boiling point 82°C

Specific Gravity 0.78@25°C

Vapour Pressure 4.4 kPa @ 20°C

Vapour Density Na

Solubility in water Miscible

pH Na

Evaporation Rate 2.4 BuAc = 1

Section 10: Stability And Reactivity

Stability of the Substance: Stable under normal conditions

Conditions to avoid: Heat, ignition, Oxides

Materials to avoid:

Hazardous Decomposition

Products:

Conditions Contributing to Hazardous Polymerization

Section 11: Toxicological Information

Eyes: Evidence exists, or practical experience predicts, that the material may

cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur. Isopropanol vapour may cause mild eye irritation at 400 ppm. Splashes may cause severe eye irritation,

possible corneal burns and eye damage.

Skin: The material is not thought to produce adverse health effects or skin

irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational

setting

Ingestion: Although ingestion is not thought to produce harmful effects (as

classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where preexisting organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health).

Inhalation: The material is not thought to produce respiratory irritation (as classified

by EC Directives using animal models). Nevertheless inhalation, of the material, especially for prolonged periods, may produce respiratory

discomfort and occasionally, distress.

Section 12: Ecological Information

Aquatic toxicity: Product is not identified as being

ecotoxic to aquatic life.

Mobility: This product is highly volatile and will

rapidly evaporate.

Persistence/degradability: Not expected to be persistent.

Other information: None

Section 13: Disposal Considerations

Care should be taken to ensure compliance with national, regional and local authority regulations. Packaging may still contain fumes and vapours that are flammable. Ensure that empty packaging is allowed to dry. If not recycled, puncture and crush before disposal to landfill. Do not use containers for storing other products.

Section 14: Transport Information



UN No: 1219

Proper Shipping Name: Isopropanol

Dangerous Goods Class: 3

Subsidiary risk

Packing Group: II Hazchem Code: 2YE

Section 15: Regulatory Information

HSNO Approval No:

Group Standard: Group Standard HSR001180 HSNO Classes: 3.1B, 6.1E(oral), 6.3B, 6.4A

Section 16: Other Information

Disclaimer

This document is based on information obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While we have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, we accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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