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Created on: 24 APR 2025
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Created by: Julian Arjuna Bisten
Last approved by: Julian Arjuna Bisten

MSDS Cover Sheet

Product Information

Product Name:	Food Grade DMEM/F12
Development ID:	DMFG01

Component

Food Grade DMEM/F12

MSDS attached

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Material Safety Data Sheet

Food Grade DMEM/F12

SECTION 1. SUBSTANCE IDENTIFICATION

1.A Product Information

Name: Food Grade DMEM/F12

1.B Product Approved Uses

Use: Cell culture of animal cells

SECTION 2. HAZARDS IDENTIFICATION

2.A Hazards classification

There are no known hazards associated with this product according to Regulation (EC) No. 1272/2008.

SECTION 3. INGREDIENT COMPOSITION/INFORMATION

3.A Ingredients

Formulation includes food-grade amino acids, vitamins, inorganic salts, sugars, etc.

SECTION 4. FIRST AID MEASURES

4.A Skin contact

Rise with soap and water. No reported danger present. Should irritation occur, contact a physician.

4.B Eye contact

Remove contact lenses if necessary and flush eyes with water for fifteen minutes. May cause eye irritation. Should irritation occur, contact a physician.

4.C Inhalation

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Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. No reported danger present. Should irritation occur, contact a physician.

4.D Ingested

Rinse mouth with water (do not swallow or induce vomiting). No reported danger present. Should irritation occur, contact a physician.

4.E Indication of any symptoms

No known medical complications associated with product. If in doubt, seek medical advice. Should irritation occur, contact a physician.

SECTION 5. FIRE FIGHTING MEASURES

5.A Extinguishing media

Use water-spray, carbon dioxide, alcohol-resistant foam, or dry chemical.

5.B Special hazards arising from the substance

No known hazards

5.C Additional information for firefighters

Do not enter fire area without proper protective equipment, including respiratory protection

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.A Personal precautions and emergency procedures

Always wear the recommended lab Personal Protective Equipment. Ensure good ventilation before use.

6.B Environmental precautions

Avoid spill to the environment. Prior to disposal, deactivate liquid with detergent.

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6.C Methods and materials for containment and cleaning up

Clean using inert, absorbent material and dispose of with other liquid chemicals.
Dispose of using suitable, closed containers.

6.D Reference to other sections

For personal protection, refer to section 8.
For proper disposal, refer to section 13.

SECTION 7. HANDLING AND STORAGE

7.A Precautions for safe handling

Use the recommended level of Personal Protective Equipment and avoid direct eye or skin contact with substance.

7.B Conditions for safe storage, including any incompatibilities

Store as specified on the 'Specification Sheet,' at 2-8°C, and in the provided container. Keep container tightly closed and away from light when not in use. Once opened, ensure remaining liquid is returned to a cool location. Always keep container upright to prevent leakage and do not remove label for any reasons.

7.C Specific end use(s)

Refer to section 1.B for approved uses.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.A Control parameters

Contains no substances with occupational exposure limit values.

8.B Exposure controls

a) Appropriate engineering controls

General industrial hygiene practice and use in a BLS-2 biosafety cabinet.

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b) Personal protective equipment

Eye protection

Wear tested and approved safety goggles or glasses.

Body protection

Wear recommended protective clothing in addition to chemical-resistant gloves. Ensure there are no holes or damages to all Personal Protective Equipment.

Respiratory protection

No additional equipment is needed if there is sufficient ventilation in the workspace. If not, wear a respirator tested and approved for laboratory use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.A Information on basic physical and chemical properties

a) Physical State	Liquid
b) Appearance	Clear
c) Odour	No data available
d) Odour threshold	No data available
e) pH	7.0 – 7.5
f) Melting point/freezing point	No data available
g) Initial boiling points and boiling range	No data available
h) Flash point	No data available
i) Evaporation rate	No data available
j) Flammability (solid, gas)	No data available
k) Upper/lower flammability or explosive limits	No data available
l) Vapour pressure	No data available
m) Vapour density	No data available
n) Relative density	No data available

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o) Water solubility	Fully miscible
p) Partition coefficient: n-octanol/water	No data available
q) Auto-ignition temperature	No data available
r) Decomposition temperature	No data available
s) Viscosity	No data available
t) Explosive properties	No data available
u) Oxidizing properties	No data available
9.B Other information	No data available

SECTION 10. STABILITY AND REACTIVITY

10.A Reactivity	No data available
10.B Chemical stability	Stable under normal conditions.
10.C Possibility of hazardous reactions	No data available
10.D Conditions to avoid	No data available
10.E Incompatible materials	None known under normal use.
10.F Hazardous decomposition products	No data available

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SECTION 11. TOXICOLOGICAL INFORMATION

11.A Information on toxicological effects

a) Acute toxicity	No data available
b) Skin corrosion/irritation	No data available
c) Serious eye damage/eye irritation	No data available
d) Respiratory or skin sensitisations	No data available
e) Germ cell mutagenicity	No data available
f) Carcinogenicity	No data available
g) Reproductive toxicity	No data available
h) Specific target organ toxicity	
– single exposure	No data available
i) Specific target organ toxicity	
– repeated exposure	No data available
j) Aspiration hazard	No data available
k) Additional information	None

SECTION 12. ECOLOGICAL INFORMATION

12.A Ecotoxicity

No data available

12.B Persistence and degradability

No data available

12.C Bioaccumulative potential

No data available

12.D Mobility in soil

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No data available

12.E Results of PBT and vPvB assessment

The mixture does not contain any ingredients which need to be assessed.

12.F Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATION

13.A Waste treatment method

Product

Deactivate product with disinfectant or deactivating chemicals and dispose of with other liquid chemical waste.

Packaging

Uncontaminated packaging can be disposed of in general waste. Contaminated waste can be disposed of with other solid biological waste.

SECTION 14. TRANSPORT INFORMATION

14.A UN number

ADR/RID: -

IMDG: -

IATA: -

14.B UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: No data available

IATA: No data available

14.C Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.D Packaging group

ADR/RID: -

IMDG: -

IATA: -

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14.E Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.F Special precautions for user

No data available

SECTION 15. REGULATORY INFORMATION

15.A Regulations specific for the substance

Manufactured in an FSSC 22000-certified facility.

SECTION 16. OTHER INFORMATION

16.A Additional information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. All materials and mixtures may present unknown hazards and should be used with caution. It does not represent any guarantee of the properties of the product. The material in this MSDS does not constitute a warranty, express or implied, including any implied warranty. Multus Biotechnology Limited products are not for use in humans and are not for diagnostic or therapeutic use. Customers agree to comply with the provisions of applicable international and local statutes, rules, regulations, ordinances, and orders when using Multus Biotechnology Limited's products. Multus products are for internal research purposes only and not for resale or transfer in any form (including as part of a kit) to a third party. Multus Biotechnology Limited is not responsible for patent infringement or other violations which may occur with the use of these products.