World Headquarters Hach Company P.O.Box 389 Loveland, CO USA 80539 (970) 669-3050

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: m-FC Broth Ampules

Catalog Number: 2373250

Hach Company P.O.Box 389 Loveland, CO USA 80539 (970) 669-3050

MSDS Number: M00614 Chemical Name: Not applicable CAS Number: Not applicable

Additional CAS No. (for hydrated forms): Not applicable

Chemical Formula: Not applicable *Chemical Family:* Not applicable

Intended Use: Detection of fecal coliform bacteria

Emergency Telephone Numbers: (Medical and Transportation) (303) 623-5716 24 Hour Service (515)232-2533 8am - 4pm CST

MSDS No: M00614

2. HAZARDS IDENTIFICATION

GHS Classification:

Hazard categories: Not applicable

GHS Label Elements:
Not applicable

Hazard statements: Not applicable Precautionary statements: Not applicable

HMIS: Health: 0 Flammability: 0 Reactivity: 0

Protective Equipment: X - See protective equipment, Section 8.

NFPA:

Health: 0 Flammability: 0 Reactivity: 0

Symbol: Not applicable

WHMIS Hazard Classification: Not applicable

WHMIS Symbols: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

Sodium Deoxycholate

CAS Number: 302-95-4 Chemical Formula: C₂₄H₃₉O₄Na

GHS Classification: Acute Tox. 4-Orl, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT Single 3, H335; Aquatic

Chronic 3, H412 Percent Range: < 0.01

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust **TLV:** 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust

WHMIS Symbols: Not applicable

Sodium Cholate

CAS Number: 361-09-1

Chemical Formula: C₂₄H₃₉O₅Na * H₂O

GHS Classification: Acute Tox. 5-Orl, H303; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT Single 3, H335; Aquatic

Chronic 3, H412 *Percent Range:* < 0.01

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust **TLV:** 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust

WHMIS Symbols: Not applicable Hazardous Components according to GHS: No

Demineralized Water

CAS Number: 7732-18-5 **Chemical Formula:** H₂O

GHS Classification: Not a dangerous substance according to GHS.

Percent Range: >95.0

Percent Range Units: weight / weight

PEL: Not established **TLV:** Not established

WHMIS Symbols: Not applicable

Lactose

CAS Number: 63-42-3 **Chemical Formula:** $C_{12}H_{22}O_{11}$ **GHS Classification:** Not applicable

Percent Range: <1.5

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust **TLV:** 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust

WHMIS Symbols: Not applicable

Tryptose

CAS Number: 9015-54-7

Chemical Formula: Not applicable *GHS Classification:* Non-Haz

Percent Range: <1.5

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust **TLV:** 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust

WHMIS Symbols: Not applicable

Sodium Chloride

CAS Number: 7647-14-5 Chemical Formula: NaCl

GHS Classification: Acute Tox. 5-Orl, H303

Percent Range: < 1.0

Percent Range Units: weight / weight

PEL: 15 mg/m³ as total dust; 5 mg/m³ as respirable dust **TLV:** 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust

WHMIS Symbols: Other Toxic Effects

Yeast Extract

CAS Number: 8013-01-2

Chemical Formula: Not applicable *GHS Classification:* Not hazardous

Percent Range: < 0.1

Percent Range Units: weight / weight

PEL: 15 mg/m³ as inhalable dust; 5 mg/m³ as respirable dust

TLV: 10 mg/m³ as inhalable dust

WHMIS Symbols: Not applicable

Proteose Peptone #3

CAS Number: Not applicable *Chemical Formula:* Not applicable

GHS Classification: Not hazardous per GHS

Percent Range: < 0.1

Percent Range Units: weight / weight

PEL: Not established **TLV:** Not established

WHMIS Symbols: Not applicable

Agar

CAS Number: 9002-18-0

Chemical Formula: Not applicable *GHS Classification:* Non Hazardous

Percent Range: < 0.1

Percent Range Units: weight / weight

PEL: Not established **TLV:** Not established

WHMIS Symbols: Not applicable

Aniline Blue

CAS Number: 28631-66-5

Chemical Formula: C32H25N3Na2O9S3

GHS Classification: Not hazardous per GHS classification criteria

Percent Range: < 0.001

Percent Range Units: weight / weight

PEL: TWA 5 mg/m3 **TLV:** 10 mg/m3

WHMIS Symbols: Not applicable

4. FIRST AID MEASURES

General Information: In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a

doctor.

Advice to doctor: Treat symptomatically.

Eye Contact: Flush eyes with water. Call physician if irritation develops. *Skin Contact (First Aid):* Wash skin with soap and plenty of water.

Inhalation: None required.

Ingestion (First Aid): Give large quantities of water. Call physician immediately.

5. FIRE FIGHTING MEASURES

Flammable Properties: Material will not burn.

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective

gear.

Extinguishing Media: Use media appropriate to surrounding fire conditions

Extinguishing Media NOT To Be Used: Not applicable

Fire / Explosion Hazards: Not applicable Hazardous Combustion Products: None reported

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.

Containment Technique: Stop spilled material from being released to the environment.

Clean-up Technique: Unused product: Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as

normal refuse. Used product: Make sure tubes are tightly capped. Sterilize with bleach or by autoclaving. **Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the

evacuation.

DOT Emergency Response Guide Number: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

Storage: Protect from: bacterial contamination light Store between 2° - 8°C.

Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment:

Eye Protection: safety glasses with top and side shields

Skin Protection: lab coat

Inhalation Protection: adequate ventilation

Precautionary Measures: Avoid contact with: eyes Wash thoroughly after handling. Protect from: light bacterial

contamination

TLV: Not established PEL: Not established

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue, opalescent solution

Physical State: Liquid

Molecular Weight: Not applicable

Odor: Not determined

Odor Threshold: Not determined

pH: 7.2 @ 25°C Metal Corrosivity:

Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.

Steel: Not determined Aluminum: Not determined

Specific Gravity/Relative Density (water = 1; air =1): \sim 1

Viscosity: Not Determined

Solubility:
Water: Soluble
Acid: Not determined
Other: Not determined

Partition Coefficient (n-octanol / water): Not applicable

Coefficient of Water / Oil: Not applicable

Melting Point: Not determined

Decomposition Temperature: Not Determined

Boiling Point: Not determined **Vapor Pressure:** Not determined

Vapor Density (air = *1)*: Not determined

Evaporation Rate (water = 1): Not determined

Volatile Organic Compounds Content: Not applicable

Flammable Properties: Material will not burn.

Flash Point: Not applicable Method: Not applicable Flammability Limits:

Lower Explosion Limits: Not applicable Upper Explosion Limits: Not applicable Autoignition Temperature: Not applicable

Explosive Properties:

Not classified according to GHS criteria.

Oxidizing Properties:

Not classified according to GHS criteria.

Reactivity Properties:

Not classifed as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Gas under Pressure:

Not classified according to GHS criteria.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Mechanical Impact: None reported *Static Discharge:* None reported.

Reactivity / Incompatibility: None reported **Hazardous Decomposition:** None reported

Conditions to Avoid: Bacterial contamination Exposure to light.

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: No information available for mixture.

Toxicologically Synergistic Products: None reported

Acute Toxicity: Based on classification principles, the classification criteria are not met.

ATE (mix) Oral LD50 > 5000 mg/Kg

Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.

Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met.

Eye Damage: Based on classification principles, the classification criteria are not met. **Sensitization:** Based on classification principles, the classification criteria are not met.

CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): Based on classification principles, the classification criteria are not met.

This product does NOT contain any IARC listed chemicals. This product does NOT contain any NTP listed chemicals. This product does NOT contain any OSHA listed carcinogens.

Symptoms/Effects:

Ingestion: Practically non-toxic
Inhalation: No effects anticipated
Skin Absorption: No effects anticipated
Chronic Effects: None reported

Medical Conditions Aggravated: None reported

12. ECOLOGICAL INFORMATION

Product Ecological Information: --

No ecological data available for this product.

Ingredient Ecological Information: --

No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable

Special Instructions (Disposal): Unused product - Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse. Used product - Make sure tubes are tightly capped. Sterilize with bleach or by autoclaving.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA Subsidiary Risk: NA ID Number: NA Packing Group: NA

T.D.G.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA Subsidiary Risk: NA UN Number/PIN: NA Packing Group: NA

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA Subsidiary Risk: NA ID Number: NA Packing Group: NA

I.M.O.:

Proper Shipping Name: Not Currently Regulated

rope

Hazard Class: NA Subsidiary Risk: NA ID Number: NA Packing Group: NA

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product does not meet the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): This product is not hazardous under 29 CFR.1910.1200 and therefore is not covered by Title III under SARA.

S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

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302 (EHS) TPQ (40 CFR 355): Not applicable 304 CERCLA RQ (40 CFR 302.4): Not applicable 304 EHS RQ (40 CFR 355): Not applicable Clean Water Act (40 CFR 116.4): Not applicable

RCRA: Contains no RCRA regulated substances.

State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.

Identification of Prop. 65 Ingredient(s): None

California Perchlorate Rule CCR Title 22 Chap 33: Not applicable

Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

CAS Number: Not applicable

Canadian Inventory Status: All ingredients of this product are DSL Listed.

EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.

Australian Inventory (AICS) Status: Not determined New Zealand Inventory (NZIoC) Status: Not determined Korean Inventory (KECI) Status: Not determined Japan (ENCS) Inventory Status: Not determined China (PRC) Inventory (MEP) Status: Not determined

16. OTHER INFORMATION

References: TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Technical Judgment. In-house information.

Complete Text of H phrases referred to in Section 3: Not applicable

Revision Summary: . Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:

Day: 24

Month: February *Year:* 2015

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products

Regulation (CPR) Section 17.

Legend:

NA - Not Applicable w/w - weight/weight
ND - Not Determined w/v - weight/volume
NV - Not Available v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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