Material Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture
Product code: Exo-UT50
Product name: ME buffer contains
 1. <1% of Deoxycholic acid
 2. <1% of meso-2,3-Dimercaptosuccinic acid
 3. <1% of 2-mercaptoethanol
 4. <1% of Ethylenediaminetetraacetic acid (EDTA), Magnesium Salt
 5. <1% of HEPES</pre>

Company/undertaking identification

Evomic Science LLC Phone:1-888-425-6866 www.evomicscience.com

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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SECTION 2: Hazards identification
GHS - Classification
Signal Word
WARNING
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Health hazards Skin sensitization: Category 1

Physical hazards Not Hazardous

Hazard Statements

H317 - May cause an allergic skin reaction H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention P280 - Wear protective gloves/protective clothing/eye protection/face protection P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P273 - Avoid release to the environment

Principle Routes of Exposure Potential Health Effects

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Eyes: May cause eye irritation with susceptible persons. Skin: May cause sensitization by skin contact. Inhalation: May cause irritation of respiratory tract. Ingestion: May be harmful if swallowed.

Specific effects

Carcinogenic effects:	None
Mutagenic effects:	None
Reproductive toxicity:	None
Sensitization:	May cause an allergic skin reaction
Target Organ Effects:	No known effects under normal use conditions

HMIS

Health: 1 Flammability: 0 Reactivity: 0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
HEPES	7365-45-9	230-907-9	<1
Deoxycholic acid	83-44-3	201-478-5	<1
2-mercaptoethanol	60-24-2	200-464-6	<1
<pre>meso-2,3-Dimercaptosuccinic acid</pre>	304-55-2	206-155-2	<1
EDTA, Magnesium Salt	39377-66-7	254-436-3	<1%

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Skin contact: Wash off immediately with plenty of water. If symptoms
persist, call a physician.
Eye contact: Rinse immediately with plenty of water, also under the
eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion: Never give anything by mouth to an unconscious person. Consult
a physician if necessary.
Inhalation: Remove to fresh air. Consult a physician if necessary.

Notes to Physician: Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media: Dry chemical. Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions: Use personal protection equipment. Methods for cleaning up: Soak up with inert absorbent material. Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for more information.

SECTION 7: Handling and storage

Handling: Always wear reccommended Personal Protective Equipment. Storage: Keep in properly labeled containers.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL	(Ceiling)	ACGIH OEL	(TWA)	ACGIH OEL	(STEL)
2-mercaptoethanol	None	None		None		None	
meso-2,3-Dimercaptos	succinic aci	d None None		None		None	
Deoxycholic acid	None	None		None		None	
HEPES	None	None		None		None	
EDTA, Magnesium	None	None		None		None	

Engineering measures: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Personal Protective: Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used. Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Hand protection: Impervious gloves.

Eye protection: Wear safety glasses with side shields (or goggles). **Skin and Body Protection:** Lightweight protective clothing.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure Control: Prevent product from entering drains.

SECTION 9: Physical and chemical properties

General information

Form: Liquid Appearance: No information available Odor: No information available Boiling point/boiling range °C: No data available °F No data available Melting point/melting range °C: No data available °F No data available flash point °C: No data available °F No data available Autoignition Temperature °C: No data available °F No data available Oxidizing properties: No information available Water solubility: soluble

SECTION 10: Stability and reactivity

polymerization Hazardous: polymerization does not occur. Stability: Stable under normal conditions. Materials to avoid: No information available. Hazardous decomposition product: No information available.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
2-mercaptoethanol	244 mg/kg Oral LD50	No data available	250 ppm/8h
meso-2,3-Dimercaptos	None		
Deoxycholic acid	None	None	None
HEPES	None	None	None
EDTA, Magnesium	None	None	None

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Principle Routes of Exposure Potential Health Effects

Eyes: May cause eye irritation with susceptible persons Skin: May cause sensitization by skin contact Inhalation: May cause irritation of respiratory tract Ingestion: May be harmful if swallowed Carcinogenic effects: None Mutagenic effects: None Reproductive toxicity: None Sensitization: May cause an allergic skin reaction Target Organ Effects: No known effects under normal use conditions

SECTION 12: Ecological information

Ecotoxicity: Chronic aquatic toxicity: Mobility: Biodegradation: Bioaccumulation: Daphnia magna Category 3 see log Pow No information available No information available

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish /Species Data/ Microtox Data	log Pow
2-mercaptoethanol	Desmodesmus subspicatus EC50=12 mg/L (72 h)	Daphnia magna EC50=1.52 mg/L (48 h)	N/A	logPow- 0.056
<i>meso-2,3-</i> Dimercaptosuccinic acid	N/A	N/A	N/A	N/A
Deoxycholic acid	N/A	N/A	N/A	N/A
HEPES	N/A	N/A	N/A	N/A
EDTA, Magnesium	N/A	N/A	N/A	N/A

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper shipping name: No dangerous good in sense of these transport regulations. Hazard Class: None Subsidiary class: None Packing group: None UN-No: None

SECTION 15: Regulatory information

Component	TSCA	
2-mercaptoethanol	Listed	
60-24-2 (<1%)		

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

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This product does not contains HAPs.

US State Regulations

Chemical Name	RTK New	RTK	RTK	RTK Rhode	RTK
	Jersey	Pennsylvania	Illinois	Island	Massachusetts
2-mercaptoethanol		Listed			Listed
meso-2,3-	N/A	N/A	N/A	N/A	N/A
Dimercaptosuccinic					
acid					
Deoxycholic acid	N/A	N/A	N/A	N/A	N/A
HEPES	N/A	N/A	N/A	N/A	N/A
EDTA, Magnesium	N/A	N/A	N/A	N/A	N/A

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D2B - Toxic materials



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Notice to reader To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. This product is for research use only.

End of Safety Data Sheet