



MATERIAL SAFETY DATA SHEET

Section 1. Company Identification and Product Information

Product Name or Identity:	Deoxycholate Agar		
Manufacturer's Name:	Acumedia Manufacturers, Inc.	Emergency Phone No.:	517/372-9200
	740 East Shiawassee	Fax No.:	517/372-0108
	Lansing, Michigan 48912	e-mail:	foodsafety@neogen.com
Date Prepared or Revised:	December 2007		

Section 2. Composition / Information on Hazardous Ingredients

Hazardous Components Specific Chemical Identity:	CAS-No.	%	EG-Number	Hazard Symbol
Sodium Citrate	6132-04-3	2.2%	N/A	Xi (Irritant)
Ferric Citrate	3522-50-7	2.2%	N/A	Xi (Irritant)
Sodium Chloride, NaCl	7647-14-5	10.9%	231-598-3	Xi (Irritant)
Potassium Phosphate	7758-11-4	4.3%	231-834-5	Xi (Irritant)
Sodium Deoxycholate	302-95-4	2.2%	206-132-7	Xn (Harmful)

Section 3. Health Hazard Identification

Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards: (Acute and Chronic)	HARMFUL. May be harmful if absorbed through the skin or ingested. Irritating to eyes, skin, and respiratory system.		
Carcinogenicity:	IARC Monographs? No	OSHA Regulated? No	
Signs and Symptoms of Exposure: May cause irritation to the eyes, mucous membranes, and upper respiratory tract. May be harmful if inhaled. Ingestion can cause a fall in blood pressure, abdominal pain, nausea, and vomiting. The toxicity of phosphates is their ability to sequester calcium. Chronic exposure of phosphates may sequester calcium and cause calcium phosphates deposits in the kidneys.			
Medical Conditions Generally Aggravated by Exposure: Possible irritation on prolonged contact with moist or sensitive areas of the skin. Persons with pre-existing skin disorders, eye problems, impaired liver, kidney, or respiratory function may be more susceptible to the effects of this material.			

Section 4. First Aid Measures

Emergency / First Aid Procedures:	General Information: Immediately remove contaminated clothing. Show physician product label.
	Ingestion: If swallowed, wash mouth out with water provided person is conscious. Seek medical attention immediately.
	Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention. If breathing is difficult, give oxygen. In case of unconsciousness, place patient on side position for transportation.
	Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention.
	Skin Contact: Remove contaminated clothing immediately. Wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Wash clothing before reuse.

Section 5. Fire and Explosion Hazard Data

Flash Point (Closed Cup): N/A	Flammable Limits: LEL: (Lower Explosive Limit): N/A, UEL: (Upper Explosive Limit): N/A
Extinguishing Media: Use water spray, Carbon dioxide, dry chemical powder, or appropriate foam.	
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions. Firefighters should wear protective equipment and self-contained breathing apparatus.	
Unusual Fire and Explosion Hazards: During heating or in case of fire, poisonous gases are produced. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.	

Section 6. Accidental Release Measures

Personal Precautions: Shut off all sources of ignition, ventilate spill area. Consider need for evacuation. Wear suitable protective clothing, gloves, and eye protection. Avoid inhalation and contact with skin and eyes. Wear self-containing breathing apparatus, rubber boots, and heavy rubber gloves. Place contaminated material in a chemical waste container.

Environmental Precautions: Prevent dispersion of material. Do not allow to enter drains or water courses.

Clean-up Methods: Contact safety officer and ventilate area. Absorb spill with inert material, including dry-lime, sand, or soda ash. Place into a chemical waste container using non-sparking tools. Wash spill site after material pickup is complete.

Section 7. Handling and Storage

Handling: Ensure good ventilation / exhaustion and do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched.

Storage: Keep container tightly closed, protect from light, moist air, and steam. Store away from oxidizing agents. Keep away from heat, sparks, and open flame. Storage area should be cool, dry, and away from incompatible materials. Containers of this material may be hazardous when empty since they retain product residues.

Section 8. Exposure Controls / Personal Protection

OES: N/A

ACGIH TLV: N/A

Engineering Measures: Do not use compressed air by filling, discharging or handling the product. Proper ventilation, safety shower, and eye bath required. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Respiratory Protection (Specify Type): Where protection from nuisance levels of dust is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Proper ventilation, safety shower, and eye bath required.

Ventilation: **Local Exhaust:** 50 – 100 CFM **Other:** Safety shower and eye bath.

Protective Gloves: Compatible chemical-resistant gloves. **Eye Protection:** Safety glasses or chemical goggles to EN 166, 167, and 168.

Other Protective Clothing or Equipment: Uniform, lab coat, or disposable lab wear.

Work / Hygienic Practices: Follow the usual precautionary measure for handling chemicals / powder. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing.

Section 9. Physical and Chemical Properties

Boiling Point: 1413°C (NaCl) **Specific Gravity:** 1.7 g/cm³ (Sodium Citrate), 2.16 g/cm³ (NaCl)
2.3 g/cm³ (Potassium Phosphate)

Vapor Pressure (mm Hg.): 1.0 @ 865°C (NaCl) **Melting Point:** 150°C (Sodium Citrate), 804°C (NaCl)
> 465°C (Potassium Phosphate)

Vapor Density (AIR = 1): N/A **Solubility in Water:** 72 g/100 g of water (Sodium Citrate)
35.7 g/100 g at 0°C (NaCl), 150 g/100 g cold water (Pot Phosphate)

Appearance and Odor: White powder, odorless (Sodium Citrate), Solid (Sodium Deoxycholate), Green / brown powder (Ferric Citrate)
Colorless crystals / white powder (NaCl), Solid white, granules, odorless (Potassium Phosphate)

Section 10. Stability and Reactivity

Stability:	Unstable		
	Stable	X	Conditions to Avoid: Heat, flames, ignition sources, light, and dust.

Incompatibility (Materials to Avoid): Strong oxidizing agents and strong bases.

Hazardous Decomposition or Byproducts: Carbon monoxide, Carbon dioxide, Iron oxides, Sodium oxides, Hydrogen chloride gas, and strong oxidizing agents. Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine

Hazardous Polymerization:	May Occur		
	Will Not Occur	X	Conditions to Avoid: Moisture, light, and incompatible materials.

**Section 11. Toxicological Information**

LD₅₀: ORL-RAT, 1,370 mg/kg (Sodium Deoxycholate) **LD₅₀:** ORL-RAT, 3000 mg/kg (Sodium Chloride)
LD₅₀: SKN-RBT, > 4640 mg/kg (Potassium Phosphate)

Section 12. Ecological Information

Ecotoxicity Tests: **LC₅₀:** 115 mg/L, 48 hrs, (*Oryzias latipes*), (Sodium Deoxycholate)
LC₅₀: 1,294.6 mg/L, 96 hrs, *Lepomis macrochirus* (Bluegill) (Sodium Chloride)

Section 13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with all applicable federal, state, and local environmental regulations. If any questions arise, contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Container Information: Do not remove labels from containers.

Section 14. Transport Information

Sodium Citrate, Ferric Citrate, Sodium Deoxycholate, Sodium Chloride, Potassium Phosphate:*

UN # --*

Class: --

Packing Group: --

Hazard Class: --

IATA: Non-Hazardous for Air Transport

*These chemicals are considered to be non-hazardous for transport.

Section 15. Regulatory Information**EU Regulations****Hazard Symbol(s):**

Sodium Citrate: Xi (Irritant)

Ferric Citrate: Xi (Irritant)

Sodium Deoxycholate: Xn (Harmful)

Risk Phrases:

Sodium Deoxycholate: R 22 / 36 / 37, Harmful if swallowed. Irritating to the eyes and respiratory system.

Sodium Chloride: R 36 / 38, Irritating to eyes and skin.

Potassium Phosphate: R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

Safety Phrases:

Sodium Chloride: S 24 / 25 / 26, Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Potassium Phosphate: S 22 / 24 / 25, Avoid contact with skin and eyes. Do not breathe dust.

Section 16. Other Information

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