CN biosciences

Material Safety Data Sheet

Order Number

Customer Number

Section 1. Chemical Product and Company Identification

Common Name	**Chenodeoxycholic Acid, Free Acid**	**Catalog #**	2204
Supplier	Calbiochem-Novabiochem Corp. 10394 Pacific Center Court San Diego, CA 92121 (858)450-5558/(800)854-3417 FAX: (858)453-3552	**In Case of Emergency**	**Call Chemtrec®** **(800)424-9300 (within U.S.A.)** **(703)527-3887 (outside U.S.A.)**
Synonym	Not available.		

Section 2. Composition, Information on Ingredients

Name	CAS #	Exposure Limits
1) Chenodeoxycholic Acid, Free Acid	474-25-9	Not available.

Section 3. Hazards Identification

Physical State and Appearance	Solid. (Solid crystalline powder.)
Emergency Overview	CAUTION! MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA. MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: BLOOD, LIVER, HEART, GASTROINTESTINAL TRACT, CARDIOVASCULAR SYSTEM, MUSCLE TISSUE. POSSIBLE CANCER HAZARD CONTAINS MATERIAL WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA. CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS BASED ON ANIMAL DATA. Risk of cancer depends on duration and level of exposure. Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Avoid exposure during pregnancy. Wash thoroughly after handling.
Routes of Entry	Absorbed through skin. Dermal contact. Inhalation. Ingestion.
Potential Acute Health Effects	
Eyes	Not available.
Skin	Hazardous in case of skin contact (permeator).
Inhalation	Hazardous in case of inhalation.
Ingestion	Hazardous in case of ingestion.
Potential Chronic Health Effects	**CARCINOGENIC EFFECTS** : Not available. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Classified POSSIBLE for human.
Medical Conditions Aggravated by Overexposure:	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
Overexposure /Signs/Symptoms	Not available.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	May be combustible at high temperature.
Flash Points	Not available.
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Not available.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill and Leak	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill and Leak	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Handling	Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 20°C (68°F).

Section 8. Exposure Controls, Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	
Eyes	Safety glasses.
Body	Lab coat.
Respiratory	Dust respirator. Be sure to use an approved/certified respirator or equivalent.
Hands	Gloves.
Feet	Not applicable.
Protective Clothing (Pictograms)	
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name	Exposure Limits
1) Chenodeoxycholic Acid, Free Acid	Not available.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Solid. (Solid crystalline powder.)
Molecular Weight	392.6 g/mole
Molecular Formula	$C_{24}H_{40}O_4$
Boiling/Condensation Point	Not available.
Melting/Freezing Point	160 to 170°C (320 to 338°F)
Specific Gravity	Not available.
Vapor Pressure	Not applicable.
Vapor Density	Not available.
Solubility	Easily soluble in methanol.

Color White.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility with Various Substances	Reactive with oxidizing agents.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

RTECS #	**FZ1980000**
Toxicity to Animals	Acute oral toxicity (LD50): >1000 mg/kg [Dog].
Chronic Effects on Humans	**TERATOGENIC EFFECTS**: Classified POSSIBLE for human. May cause damage to the following organs: blood, liver, heart, gastrointestinal tract, cardiovascular system, muscle tissue.
Other Toxic Effects on Humans	Hazardous in case of skin contact (permeator), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May cause congenital malformations in the foetus. May cause tumors.
Special Remarks on Other Toxic Effects on Humans	Can cause gastrointestinal disturbances. Repeated or prolonged exposure to the substance can produce liver damage.

Section 12. Ecological Information

Ecotoxicity	Not available.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.

Consult your local or regional authorities.

Section 14. Transport Information

DOT Classification	Not a DOT controlled material (United States). Not regulated.
TDG Classification	Not controlled under TDG (Canada). Not regulated.
Marine Pollutant	Not available.
Special Provisions for Transport	Not applicable.
ADR/RID Classification	Not controlled under ADR (Europe).
IMO/IMDG Classification	Not controlled under IMDG.
ICAO/IATA Classification	Not controlled under IATA.

Section 15. Regulatory Information

HCS Classification	CLASS: May cause cancer. CLASS: Target organ effects.
U.S. Federal Regulations	TSCA: No products were found. SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found. SARA 313 toxic chemical notification and release reporting: No products were found. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.
WHMIS (Canada)	Not controlled under WHMIS (Canada). No products were found.
International Regulations	
EINECS	Not available.
DSCL (EEC)	R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. R40- Possible risks of irreversible effects. R47- May cause birth defects.
International Lists	No products were found.
State Regulations	No products were found. California prop. 65: No products were found.

Section 16. Other Information

Label Requirements	MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA. MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: BLOOD, LIVER, HEART, GASTROINTESTINAL TRACT, CARDIOVASCULAR SYSTEM, MUSCLE TISSUE. POSSIBLE CANCER HAZARD CONTAINS MATERIAL WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA. CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS BASED ON ANIMAL DATA.

Hazardous Material Information System (U.S.A.)

Health	*	1
Fire Hazard		1
Reactivity		0
Personal Protection		E

National Fire Protection Association (U.S.A.)

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.