



SAFETY DATA SHEET

Section 1: Product and Company Identification

PRODUCT IDENTIFIER

Product Name AltairCHO® Medium, Liquid
Product Code C673017-01

For Research Use or Further Manufacturing. Not for diagnostic or therapeutic use in humans or animals.

SUPPLIER

OPM Biosciences, Inc.
5653 Stoneridge Dr., Ste. 117&118
Pleasanton, CA 94588, USA
(925) 523-2199
opmus_sales@opmbiosciences.com / Tech-support@opmbiosciences.com

IN CASE OF EMERGENCY

In the United States: For 24/7 multilingual advice for a spill, leak, fire, exposure, or accident, please call CHEMTREC at +1 703-527-3887 (Washington DC) or 1-800-424-9300 (toll-free) and provide CCN 1023867.

For locations outside of United States: Please contact VelocityEHS at +1 813-248-0585. Collect calls are accepted. Shipments originating in USA and going to other locations outside of USA should also contact 1-800-255-3924. Please provide contract number MIS6517807 in the call. If the caller does not speak English, after accepting the call, VelocityEHS will conference call to their on-line translation service for live interpretation.

SECTION 2: Hazard Identification

GHS CLASSIFICATION

According to GHS system (10th revised edition), not classified as a hazardous chemical.

GHS LABEL ELEMENTS

Hazard pictograms None
Signal word None



HAZARD STATEMENTS

Not Applicable

PRECAUTIONARY STATEMENTS

Prevention	Not Applicable
Response	Not Applicable
Storage	Not Applicable
Disposal	Not Applicable

HAZARD DESCRIPTION

Physical and chemical hazards

Not expected to present physical or chemical hazards under normal use.

Health hazards

Inhaled

Inhalation of this product may produce adverse health effects or irritation of the respiratory tract following discomfort.

Ingestion

Accidental ingestion of the product may be harmful to the health of the individual.

Skin contact

Entry into the bloodstream through, for example, cuts, abrasions, or lesions may produce systemic injury with harmful effects.

Eye

This product may cause temporary discomfort following direct contact with the eye.

Environmental hazards

Please refer to Section 12 of SDS.



SECTION 3: Composition/Information on Ingredients

SUBSTANCE/MIXTURE

Component	CAS No.	EC No.	Concentration (Volume or weight percent, %)
Amino acid salts	N/A	N/A	Commercial secrets
Nickel (II) sulfate hexahydrate (1:1:6)	10101-97-0	N/A	<0.001%
Cadmium Chloride 2.5H ₂ O	35658-65-2	N/A	<0.001%

We recommend handling all chemicals with caution.

SECTION 4: First-Aid Measures

DESCRIPTION OF FIRST AID MEASURES

Eye contact	Check for and remove any contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feeling uncomfortable or unwell.
Skin contact	Remove contaminated clothing. Rinse contaminated skin thoroughly with water. Seek medical help if symptoms occur.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim to fresh air. If victim has difficulty breathing, consult a physician immediately.
Protection of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

1. Please refer to Section 11 of SDS.
-



INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

1. Treat symptomatically.
2. Symptoms may be delayed.

SECTION 5: Fire-Fighting Measures

EXTINGUISHING MEDIA

- | | |
|---------------------------------------|--|
| Suitable extinguishing media | Use extinguishing media suitable for surrounding area. |
| Unsuitable extinguishing media | There is no restriction on the type of extinguisher which may be used. |

SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

1. Not considered a significant fire risk, however containers may burn.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

1. As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2. Fight fire from a safe distance, with adequate cover.
3. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

1. Use personal protective equipment, do not breathe gas/mist/vapor/spray.
2. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
3. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

ENVIRONMENTAL PRECAUTIONS

1. Prevent further leakage or spillage if safe to do so.
2. Discharge into the environment must be avoided.



METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

1. Cut off the source of the leak as much as possible.
2. Keep leaks in a ventilated place.
3. Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
4. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
5. Contain spillage and then collect with an electrically protected vacuum cleaner or by wet-brushing and collect in an appropriate waste container for proper disposal.

SECTION 7: Handling and Storage

PRECAUTIONS FOR SAFE HANDLING

1. Handling should be performed in a well-ventilated place.
2. Wear suitable personal protective equipment.
3. Avoid contact with skin and eyes.
4. Keep away from heat/sparks/open flames/hot surfaces.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

1. Keep containers tightly closed.
2. Protect from light and keep dry. Storage temperature: 2-8 °C.
3. Keep away from heat/sparks/open flames/hot surfaces.
4. Store away from incompatible materials and foods and drinks.

SECTION 8: Exposure Controls/Personal Protection

CONTROL PARAMETERS

Exposure limits	Contains no substances with occupational exposure limit values.
Biological limit values	No relevant regulation
Engineering measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location and operational. Set up emergency exit and necessary risk-elimination area. Handle in accordance with good industrial hygiene and safety practices.

PERSONAL PROTECTIVE EQUIPMENT

General requirement	No special requirements, please see the descriptions below.
----------------------------	---



Eye protection	Under normal laboratory conditions, eye protection is not required. In the production process or when there is risk for the formation of vapor or dust, tight sealing safety goggles are recommended.
Hand protection	Under normal laboratory conditions, hand protection is not required.
Respiratory protection	Under normal laboratory conditions, respiratory protection is not required. If exposure limits are exceeded or if irritation or other symptoms are experienced, wear dust proof mask or gas defense mask.
Skin and body protection	Generally, skin and body protection are not required.

SECTION 9: Physical and Chemical Properties

PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Clear red liquid
Odor	No data available
pH	7 (Neutral) (pH tested directly)
Melting point/freezing point(°C)	No data available
Boiling point / boiling range(°C)	No data available
Flash point(°C)	Above 93 °C (ASTM D 7094)
Evaporation rate	No data available
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	No data available
Vapor pressure	No data available
Relative vapor density (Air =1)	No data available
Relative density (Water=1)	No data available
Solubility	No data available
n-octanol/water partition coefficient	No data available
Auto-ignition temperature(°C)	No data available
Decomposition temperature(°C)	No data available
Kinematic viscosity	No data available
Particle characteristics	No data available



SECTION 10: Stability and Reactivity

PHYSICAL AND CHEMICAL PROPERTIES

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under normal use and proper
Possibility of hazardous reactions	No information available.
Conditions to avoid	Incompatible materials, heat, flame, and spark.
Incompatible materials	No information available.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

ACUTE TOXICITY

Acute toxicity	No information available
-----------------------	--------------------------

CARCINOGENICITY

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Amino acid salts	Not Listed	Not Listed

OTHERS

Irritation	Classification criteria not met
Corrosivity	Classification criteria not met
Sensitization	Classification criteria not met
Specific target organ toxicity (STOT) - single exposure	Classification criteria not met
Specific target organ toxicity (STOT) - repeated exposure	Classification criteria not met
Carcinogenicity	Classification criteria not met



Mutagenicity	Classification criteria not met
Reproductive toxicity	Classification criteria not met
Aspiration hazard	Classification criteria not met

SECTION 12: Ecological Information

ECOLOGICAL INFORMATION

Acute aquatic toxicity	No information available
Chronic aquatic toxicity	No information available
Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available
Results of PBT and vPvB assessment	No information available

SECTION 13: Disposal Considerations

Waste treatment methods and disposal	This material must be disposed of in accordance with approved disposal methods. Disposal of this product, its solutions, or of any by-products shall comply with the requirements of all applicable local, regional, or national/federal regulations. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazards when empty. Keep away from heat and ignition sources. Return to supplier for recycling if possible.



SECTION 14: Transport Information

LABEL

Transporting Label Not applicable

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number Not applicable

UN proper shipping name Not applicable

Transport hazard class(es) Not applicable

Packing group Not applicable

SECTION 15: Regulatory Information

INTERNATIONAL CHEMICAL INVENTORY

Component	EC inventory	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIICS	ENCS
Amino acid salts	×	×	×	×	×	×	×	×	×

- [EC inventory] European Inventory of Existing Commercial Chemical Substances
- [TSCA] United States Toxic Substances Control Act Inventory
- [DSL] Canadian Domestic Substances List
- [IECSC] China Inventory of Existing Chemical Substances
- [NZIoC] New Zealand Inventory of Chemicals
- [PICCS] Philippines Inventory of Chemicals and Chemical Substances
- [KECI] Korea Existing Chemicals Inventory
- [AIICS] Australian. Inventory of Industrial Chemical
- [ENCS] Japan Inventory of Existing & New Chemical Substances

Note: “√” Indicates that the substance included in the regulations
 “×” No data or not included in the regulations.



US STATE REGULATIONS

Chemical Name	Massachusetts - RTK (Right-to-Know)	New Jersey - RTK (Right-to-Know)	Pennsylvania - RTK (Right-to-Know)
Nickel (II) sulfate hexahydrate (1:1:6)	Listed	Listed	Listed
Cadmium Chloride 2.5H ₂ O	Listed	Listed	Listed

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS No.	Weight-%	Category
Nickel (II) sulfate hexahydrate (1:1:6)	10101-97-0	<0.001%	Carcinogen Developmental Male Reproductive
Cadmium Chloride 2.5H ₂ O	35658-65-2	<0.001%	Carcinogen Listed

WHMIS Hazard Class

This product has been classified in accordance with the Hazardous Products Regulations (HPR). It is not considered a hazardous product under WHMIS 2015.

SECTION 16: Other information

INFORMATION ON REVISION

Creation date	2024/08/28
Revision date	2025/11/12
Version Number	NASDS101A

REFERENCE

- [1] ICSC: <https://www.ilo.org/dyn/icsc/showcard.home>
- [2] IARC: <http://www.iarc.fr/>
- [3] OECD: <https://www.echemportal.org/echemportal/>
- [4] CAMEO: <http://cameochemicals.noaa.gov/search/simple>
- [5] NLM: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- [6] EPA: <http://cfpub.epa.gov/iris/>
- [7] ERG: <http://www.phmsa.dot.gov/hazmaUlibrary/erg>
- [8] Germany GESTIS-database on hazard substance: <http://gestis-en.itrust.de/>



ABBREVIATIONS AND ACRONYMS

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organized for Economic Cooperation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC ₅₀	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD ₅₀	Lethal Dose 50%	NTP	National Toxicology Program
EC ₅₀	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC _X	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulate
P _{OW}	Partition Coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration Factor	RPE	Respiratory Protective Equipment
ED	Endocrine Disruptor		

DISCLAIMER

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 10th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.

End of Safety Data Sheet