

Material Safety Data Sheet

MAS chemTRAK H Liquid Chemistry Control

Section 1 - Chemical Product and Company Identification

MSDS Name:

MAS chemTRAK H Liquid Chemistry Control

Catalog Numbers:

CHA-1, CHA-2, CHA-3, CHA-SP, CHU-1, CHU-2, CHU-3, CHU-SP

Synonyms:

None Known.

Company Identification:Microgenics Corporation
46360 Fremont Blvd
Fremont, CA 94538**Company Phone Number:**

(510) 979-5000

Emergency Phone Number:

(510) 979-5000

CHEMTREC Phone Number, US:

(800) 424-9300

CHEMTREC Phone Number, Europe:

(202) 483-7616

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent	EINECS/ ELINCS	Hazard Symbols	Risk Phrases
66-81-9	Cycloheximide	<0.1%	200-636-0		
64-17-5	Ethyl alcohol	<0.1%	200-578-6	F	11
50-06-6	Phenobarbital	<0.1%	200-007-0		
20830-75-5	Digoxin	<0.1%	244-068-1		
1403-66-3	Gentamicin	<0.1%	215-765-8		
57-41-0	Phenytoin	<0.1%	200-328-6		
99-66-1	Valproic acid	<0.1%	202-777-3		
125-33-7	Primaclone	<0.1%	204-737-0		

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Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: Clear amber liquid

Caution! This material is prepared from bovine source material. May be harmful if swallowed. May cause respiratory and digestive tract irritation. May cause eye and skin irritation. The toxicological properties of this material have not been fully investigated.

Target Organs: No data found

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.

Section 4 - First Aid Measures

Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

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Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature:

Not available

Explosion Limits:

Lower: Not available Upper: Not available

Flash Point:

Not available

NFPA Rating:

(estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation. Wash area with a 5% chlorine bleach solution or equivalent, then rinse with water.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Material produced in compliance to USDA and/or CPMP/BWP/1230/98 (or amendment as applicable) (Guidance on Minimizing the Risk of Transmitting Animal Spongiform Encephalopathy Agents via Medicinal Products). This is a CPMP/BWP/1230/98 Category IV material: It does not contain, nor is it derived from Specified Risk Materials as defined in Commission decision 97/534/EC (or successive amendments).

Storage:

Store in a tightly closed container. Store at -20°C.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

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Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Cycloheximide	None listed	None listed	None listed
Ethyl alcohol	1000 ppm TWA	1000 ppm TWA; 1900 mg/m ³ TWA 3300 ppm IDLH	1000 ppm TWA; 1900 mg/m ³ TWA;
Phenobarbital	None listed	None listed	None listed
Digoxin	None listed	None listed	None listed
Gentamicin	None listed	None listed	None listed
Phenytoin	None listed	None listed	None listed
Valproic acid	None listed	None listed	None listed
Primaclone	None listed	None listed	None listed

OSHA Vacated PELs

Ethyl alcohol: 1000 ppm TWA; 1900 mg/m³ TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: Clear amber

Odor: No information found

pH: 7.6

Vapor Pressure: No information found

Vapor Density: No information found

Evaporation Rate: No information found

Viscosity: No information found

Boiling Point: No information found

Freezing/Melting Point: No information found

Decomposition Temperature: No information found

Solubility in water: Miscible.

Specific Gravity/Density: No information found

Molecular Formula: Solution

Molecular Weight: No information found

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Section 10 - Stability and Reactivity

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

Excess heat

Incompatibilities with Other Materials

None reported

Hazardous Decomposition Products

None

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 66-81-9: MA4375000
CAS# 64-17-5: KQ6300000
CAS# 50-06-6: CQ6825000
CAS# 20830-75-5: IH6125000
CAS# 1403-66-3: LY2450000
CAS# 57-41-0: MU1050000
CAS# 99-66-1: YV7875000
CAS# 125-33-7: UV9100000

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LD50/LC50:

CAS# 66-81-9:

Draize test, rabbit, skin: 1 pph/24H Moderate

Oral, mouse: LD50 = 133 mg/kg

Oral, rat: LD50 = 2 mg/kg.

CAS# 64-17-5:

Draize test, rabbit, eye: 500 mg Severe

Draize test, rabbit, eye: 500 mg/24H Mild

Draize test, rabbit, skin: 20 mg/24H Moderate

Inhalation, mouse: LC50 = 39 gm/m³/4H

Inhalation, rat: LC50 = 20000 ppm/10H

Oral, mouse: LD50 = 3450 mg/kg

Oral, rabbit: LD50 = 6300 mg/kg

Oral, rat: LD50 = 7060 mg/kg

Oral, rat: LD50 = 9000 mg/kg.

CAS# 50-06-6:

Oral, mouse: LD50 = 137 mg/kg

Oral, rabbit: LD50 = 185 mg/kg

Oral, rat: LD50 = 162 mg/kg.

CAS# 20830-75-5:

Oral, mouse: LD50 = 17780 ug/kg

Oral, rat: LD50 = 28270 ug/kg.

CAS# 1403-66-3:

Oral, mouse: LD50 = 10 gm/kg

Oral, rat: LD50 = 6600 mg/kg.

CAS# 57-41-0:

Oral, mouse: LD50 = 150 mg/kg

Oral, rabbit: LD50 = >3 gm/kg

Oral, rat: LD50 = 1635 mg/kg.

CAS# 99-66-1:

Oral, mouse: LD50 = 1098 mg/kg

Oral, rat: LD50 = 670 mg/kg.

CAS# 125-33-7:

Oral, mouse: LD50 = 280 mg/kg

Oral, rat: LD50 = 1500 mg/kg.

Carcinogenicity:

CAS# 66-81-9: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 64-17-5: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 50-06-6

ACGIH: Not listed

California: carcinogen, initial date 1/1/90

NTP: Not listed

IARC: Group 2B carcinogen

CAS# 20830-75-5: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 1403-66-3: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 57-41-0

ACGIH: Not listed

California: carcinogen, initial date 1/1/88

NTP: Suspect carcinogen

IARC: Group 2B carcinogen

CAS# 99-66-1: Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 125-33-7

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ACGIH: Not listed
California: carcinogen, initial date 8/20/99
NTP: Not listed
IARC: Not listed

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found

Neurotoxicity:

No information found

Other:

The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P Series Wastes

None of the components are on this list.

RCRA U Series Wastes

None of the components are on this list.

Section 14 - Transport Information

US DOT**Canadian TDG**

Proper Shipping Name: CARBON DIOXIDE,
SOLID
Hazard Class: 8
UN Number: UN1845
Packing Group: III

No information found

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Section 15 - Regulatory Information

European/International Regulations

European Labelling in Accordance with EC Directives:

Hazard Symbols: None listed
Risk Phrases: None listed
Safety Phrases: S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

Not available

United Kingdom Occupational Exposure Limits

Not available

United Kingdom Maximum Exposure Limits

Not available

Canadian DSL/NDSL

CAS# 64-17-5 is listed on Canada's DSL List.
CAS# 50-06-6 is listed on Canada's DSL List.
CAS# 20830-75-5 is listed on Canada's DSL List.
CAS# 57-41-0 is listed on Canada's DSL List.
CAS# 99-66-1 is listed on Canada's DSL List.
CAS# 125-33-7 is listed on Canada's DSL List.

Canadian WHMIS Classifications

Not available
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 64-17-5 is listed on the Canadian Ingredient Disclosure List.

US Federal

TSCA

CAS# 66-81-9 is not listed on the TSCA Inventory. It is for research and development use only.
CAS# 64-17-5 is listed on the TSCA Inventory.
CAS# 50-06-6 is not listed on the TSCA Inventory. It is for research and development use only.
CAS# 20830-75-5 is listed on the TSCA Inventory.
CAS# 1403-66-3 is not listed on the TSCA Inventory. It is for research and development use only.
CAS# 57-41-0 is not listed on the TSCA Inventory. It is for research and development use only.
CAS# 99-66-1 is not listed on the TSCA Inventory. It is for research and development use only.
CAS# 125-33-7 is not listed on the TSCA Inventory. It is for research and development use only.

Health and Safety Reporting List

None of the components are on this list.

Chemical Test Rules

None of the components are on this list.

TSCA Section 12b

None of the components are on this list.

TSCA Significant New Use Rule (SNUR)

None of the components are on this list.

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CERCLA Hazardous Substances and corresponding RQs

None of the components are on this list.

SARA Section 302 Extremely Hazardous Substances

CAS# 66-81-9: 100 lb lower threshold TPQ; 10000 lb upper threshold TPQ

CAS# 20830-75-5: 10 lb lower threshold TPQ; 10000 lb upper threshold TPQ

SARA Hazard Categories

CAS# 66-81-9: immediate, delayed.

CAS# 64-17-5: immediate, delayed, fire.

SARA Section 313

Phenytoin is not at a high enough concentration to be reportable under Section 313.

Clean Air Act - Hazardous Air Pollutants (HAPs)

None of the components are on this list.

Clean Air Act - Class 1 Ozone Depletors

None of the components are on this list.

Clean Air Act - Class 2 Ozone Depletors

None of the components are on this list.

Clean Water Act - Hazardous Substances

None of the components are on this list.

Clean Water Act - Priority Pollutants

None of the components are on this list.

Clean Water Act - Toxic Pollutants

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

OSHA - Specifically Regulated Chemicals

None of the components are on this list.

US State

State Right to Know

Cycloheximide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Massachusetts.

Ethyl alcohol can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Phenobarbital can be found on the following state Right-to-Know lists: California, Minnesota, Massachusetts.

Digoxin can be found on the following state Right-to-Know lists: New Jersey, Pennsylvania, Massachusetts.

Phenytoin can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Valproic acid can be found on the following state Right-to-Know lists: Massachusetts.

No information found

California Prop 65

WARNING: This product contains Phenobarbital, a chemical known to the State of California to cause cancer.

WARNING: This product contains Phenytoin, a chemical known to the State of California to cause cancer.

WARNING: This product contains Primaclone, a chemical known to the State of California to cause cancer.

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WARNING: This product contains Cycloheximide, a chemical known to the state of California to cause developmental reproductive toxicity.

WARNING: This product contains Phenytoin, a chemical known to the state of California to cause developmental reproductive toxicity.

WARNING: This product contains Valproic acid, a chemical known to the state of California to cause developmental reproductive toxicity.

California No Significant Risk Level

None of the components are on this list.

None of the components are on this list.

CAS# 50-06-6: 2 æg/day NSRL

None of the components are on this list.

None of the components are on this list.

None of the components are on this list.

None of the components are on this list.

None of the components are on this list.

Section 16 - Other Information

Color information has been

MSDS Creation Date: September 23, 2003

Revision Date: March 16, 2007

This MSDS is intended for review and guidance in the receipt, storage, handling, use and disposal of product purchased from us, and for no other purpose. Use this product only as directed and in accordance with applicable instructions and warnings provided with the product. Please consult your institution's policies regarding use of this product. If you have obtained this MSDS other than in connection with the supply of this product from us, this MSDS should be consulted for general information only, and should not be relied upon for any purpose. As with the use of all hazardous materials, you should in all instances follow the guidance of the MSDS provided or available with the specific product purchased.