

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

074789186

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

074789178 074789194 074789202 074789210 074789228 074789236 074789244 074789251 074789301 074789319

074789327 074789335 074789343 074789350 074789368 074789376

# Material Safety Data Sheet

May be used to comply with  
OSHA's Hazard Communication Standard,  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements.

# U.S. Department of Labor



Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

KROMATICA ALGINATE (COLOR CHANGING)

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

## Section I

Manufacturer's Name MATECH, INC.	Emergency Telephone Number (818) 367-2472
Address (Number, Street, City, State, and ZIP Code) 13000 SAN FERNANDO ROAD SYLMAR, CA 91342	Telephone Number for Information (818) 367-2472
	Date Prepared 01-01-07
	Signature of Preparer (optional) PAUL L. SAXTON

## Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
DIATOMACIOUS EARTH	1.2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	6 mg/m <sup>3</sup>	-----
HYDROUS CALCIUM SULFATE	NONE	NONE	NONE	-----
TETRASODIUM PYROPHOSPHATE	5. mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	-----	-----
POTASSIUM ALGINATE	-----	-----	-----	-----
POTASSIUM TITANIUM FLUORIDE	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>	-----	-----

## Section III - Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O = 1)	0.3 g/c
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	PARTIALLY		
Appearance and Odor	DRY FLUFFY POWDER WITH MINT, CHERRY OR BUBBLEGUM FLAVOR; MAY BE TINTED.		

## Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL -	UEL -
Extinguishing Media N/A			
Special Fire Fighting Procedures N/A			
Unusual Fire and Explosion Hazards : USE COMMON WITH MOST ORGANIC MATERIALS, THIS PRODUCT SHOULD BE TREATED AS COMBUSTIBLE DUST IN THIS FINELY DIVIDED AND SUSPENDED STATE.			

**Section V - Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	<b>X</b>	
Incompatibility ( <i>Materials to Avoid</i> ) N/A			
Hazardous Decomposition or Byproducts NONE. WILL SOLIDIFY IF CONTACTED BY WATER			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	<b>X</b>	

**Section VI - Health Hazard Data**

EFFECT OF OVEREXPOSURE INHALATION: Avoid inhalation of excessive dust.

SKIN & EYE IRRITATION: May cause dryness and/or irritation.

EMERGENCY AND FIRST AID: flush eyes with water for 15 minutes. Wash skin.

**Section VII - Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material is Released or Spilled VACUUM: AVOID CREATING DUST. DO NOT WASH DOWN DRAINS, AS MATERIAL WILL PLUG DRAINS.
Waste Disposal Method NO SPECIAL METHOD
Precautions to Be taken in Handling and Storing STORE IN DRY AREA
Other Precautions MINIMIZE DUST AT ALL TIMES

**Section VIII - Control Measures**

Respiratory Protection ( <i>Specify Type</i> )			
Ventilation	Local Exhaust	<b>X</b>	Special -
	Mechanical ( <i>General</i> )	-	Other -
Protective Gloves	Eye Protection SAFETY GLASSES WHEN EXPOSED TO DUST		
Other Protective Clothing or Equipment OPTIONAL			
Work/Hygienic Practices AVOID CREATING AND BREATHING DUST			

## Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

**Effective date:** 01.06.2016

**Trade Name:** Kromatica Color-Changing Alginate

### 1 Identification of the substance/mixture and of the supplier

#### 1.1 Product identifier

**Trade Name:** Kromatica Color-Changing Alginate

**Synonyms:**

**Product number:** Kromatica Color-Changing Alginate

**1.2 Application of the substance / the mixture :** Dental Impression Material

#### 1.3 Details of the supplier of the Safety Data Sheet

**Manufacturer**

MATECH, INC.

13000 SAN FERNANDO ROAD

SYLMAR, CA 91342

(818) 367-2472

**Emergency telephone number:**

**Matech, Inc.**

818-367-2472

### 2 Hazards identification

#### 2.1 Classification of the substance or mixture:

In compliance with EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments.

**Hazard-determining components of labeling:**

Potassium Alginate

Zinc oxide

Potassium Titanium Fluoride

Sodium Phosphate

#### 2.2 Label elements:

Serious eye damage, category 1.

Acute aquatic hazard, category 1.

Chronic aquatic hazard, category 1.

**Hazard pictograms:**



**Signal word:** Danger

**Hazard statements:**

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P391 Collect spillage.

P501 Dispose of contents and container as instructed in Section 13.

## Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

**Effective date:** 01.06.2016

**Trade Name:** Kromatica Color-Changing Alginate

**Additional information:** None.

### Hazard description

**Hazards Not Otherwise Classified (HNOC):** None

### Information concerning particular hazards for humans and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

### Classification system:

The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

## 3 Composition/information on ingredients

**3.1 Chemical characterization :** Mixture.

**3.2 Description :** None

**3.3 Hazardous components (percentages by weight)**

Identification	Chemical Name	Classification	Wt. %
<b>CAS number:</b> 9005-36-1	Potassium Alginate		10-20
<b>CAS number:</b> 7778-18-9	Calcium Sulfate		10-20
<b>CAS number:</b> 1314-13-2	Zinc oxide	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<10
<b>CAS number:</b> 16919-27-0	Potassium Titanium Fluoride	Acute Tox. 4; H303 Eye Dam. 1; H318	<10
<b>CAS number:</b> 7601-54-9	Sodium Phosphate	Skin Irrit. 2 ; H315 Eye Irrit. 2; H319 Stot SE 3; H335	<5
<b>CAS number:</b> 68855-54-9	Diatomaceous Earth		40-50

**3.4 Additional Information :** None.

## 4 First aid measures

**4.1 Description of first aid measures**

### General information:

Avoid inhalation of excessive dust.

### After inhalation:

Maintain an unobstructed airway.

Loosen clothing as necessary and position individual in a comfortable position.

### After skin contact:

Rinse affected area with soap and water.

If symptoms develop or persist, seek medical attention.

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### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes.  
Remove contact lens(es) if able to do so during rinsing.  
Immediately call a POISON CONTROL CENTER or seek medical attention.

### After swallowing:

Seek medical attention if irritation, discomfort, or vomiting persists.  
Rinse mouth thoroughly.

### 4.2 Most important symptoms and effects, both acute and delayed

None

### 4.3 Indication of any immediate medical attention and special treatment needed:

No additional information.

## 5 Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing agents:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**For safety reasons unsuitable extinguishing agents :** None

### 5.2 Special hazards arising from the substance or mixture :

Thermal decomposition can lead to release of irritating gases and vapors.

### 5.3 Advice for firefighters

#### Protective equipment:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  
Refer to Section 8.

### 5.4 Additional information :

Avoid contact with skin, eyes and clothing.  
Avoid inhaling gases, fumes, dust, mist and vapor.

## 6 Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures :

Ensure air handling systems are operational.  
Ensure adequate ventilation.

### 6.2 Environmental precautions :

Prevent from reaching drains, sewer or waterway.  
Should not be released into the environment.

### 6.3 Methods and material for containment and cleaning up :

Always obey local regulations.  
Sweep or scoop up solid material while minimizing dust generation.  
Wear protective eye wear, gloves and clothing.

### 6.4 Reference to other sections : None

## 7 Handling and storage

## Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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**Trade Name:** Kromatica Color-Changing Alginate

### 7.1 Precautions for safe handling :

Do not eat, drink, smoke or use personal products when handling chemical substances.  
Do not taste or swallow.

### 7.2 Conditions for safe storage, including any incompatibilities :

Keep container tightly sealed.  
Store in a cool, well-ventilated area.  
Store away from incompatible materials.

### 7.3 Specific end use(s):

No additional information.

## 8 Exposure controls/personal protection



### 8.1 Control parameters :

7778-18-9, Calcium Sulfate, OSHA TWA 15.0 mg/m<sup>3</sup>.  
7778-18-9, Calcium Sulfate, NIOSH TWA 5.0 mg/m<sup>3</sup>.  
7778-18-9, Calcium Sulfate, OSHA TWA 5.0 mg/m<sup>3</sup>.  
1314-13-2, Zinc Oxide, OSHA PEL (STEL): 10.0mg/m<sup>3</sup>.  
7778-18-9, Calcium Sulfate, NIOSH TWA 10.0 mg/m<sup>3</sup>.  
1314-13-2, Zinc Oxide, OSHA PEL (TWA): 2.0 mg/m<sup>3</sup>.  
7601-54-9, Sodium Phosphate, Workplace Environmental Exposure Level (WEEL): Short-term Exposure Limit (STEL) 5 mg/cu m, 15 min.

### 8.2 Exposure controls

#### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

#### Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

#### Protection of skin:

Wear appropriate clothing to prevent any possibility of skin contact.  
Select glove material impermeable and resistant to the substance.

#### Eye protection:

Safety glasses or goggles are appropriate eye protection.

#### General hygienic measures:

Avoid contact with skin, eyes and clothing.  
Wash hands before breaks and at the end of work.

## 9 Physical and chemical properties

## Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

**Effective date:** 01.06.2016

Trade Name: Kromatica Color-Changing Alginate			
<b>Appearance (physical state, color):</b>	Dry fluffy powder with mint, cherry, or bubblegum flavor; may be tinted.	<b>Explosion limit lower:</b> <b>Explosion limit upper:</b>	Not determined or not available. Not determined or not available.
<b>Odor:</b>	Not determined or not available.	<b>Vapor pressure at 20°C:</b>	Not determined or not available.
<b>Odor threshold:</b>	Not determined or not available.	<b>Vapor density:</b>	Not determined or not available.
<b>pH-value:</b>	Not determined or not available.	<b>Relative density:</b>	0.3 g/c
<b>Melting/Freezing point:</b>	Not determined or not available.	<b>Solubilities:</b>	Partially soluble in water.
<b>Boiling point/Boiling range:</b>	Not determined or not available.	<b>Partition coefficient (n-octanol/water):</b>	Not determined or not available.
<b>Flash point (closed cup):</b>	Not determined or not available.	<b>Auto/Self-ignition temperature:</b>	Not determined or not available.
<b>Evaporation rate:</b>	Not determined or not available.	<b>Decomposition temperature:</b>	Not determined or not available.
<b>Flammability (solid, gaseous):</b>	Not determined or not available.	<b>Viscosity:</b>	a. Kinematic: Not determined or not available. b. Dynamic: Not determined or not available.
<b>Density at 20°C:</b>	Not determined or not available.		

### 10 Stability and reactivity

#### 10.1 Reactivity :

Nonreactive under normal conditions.

#### 10.2 Chemical stability :

Stable under normal conditions of use and storage.

#### 10.3 Possibility hazardous reactions :

None identified.

#### 10.4 Conditions to avoid :

Incompatible materials.

#### 10.5 Incompatible materials :

Strong acids, bases, and oxidizing agents.

#### 10.6 Hazardous decomposition products :

Thermal decomposition can lead to release of irritating gases and vapors.

### 11 Toxicological information

#### 11.1 Information on toxicological effects :

##### Acute Toxicity:

Oral:



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Diatomaceous Earth: LD50 Rat: > 2000mg/kg .

Potassium Titanium Fluoride: LD50 Rat: 324 mg/kg .

Sodium Phosphate: LD50 Rat: 4.8 mg/kg .

**Dermal:**

Sodium Phosphate: LD50 Rabbit: Greater than or equal to 2 mg/kg bw .

**Inhalation:**

Sodium Phosphate: LD50 Rat: Greater than or equal to/ 2.16 mg/L/1 hr .

**Chronic Toxicity:** No additional information.

**Skin corrosion/irritation:**

Potassium Titanium Fluoride: Mild skin irritation - Rabbit. .

**Serious eye damage/irritation:**

Sodium Phosphate: Rabbits showed conjunctival redness scores of  $\geq 2$  .

Potassium Titanium Fluoride: Severe eye irritation - Rabbit. .

**Respiratory or skin sensitization:**

Zinc Oxide: Mild skin irritation - 24 h.

Zinc Oxide: Risk of serious damage to eyes. - 1 h.

**Carcinogenicity:** No additional information.

**IARC (International Agency for Research on Cancer):**

Group 2B - Possibly carcinogenic to humans: Calcium Sulfate.

**NTP (National Toxicology Program):** None of the ingredients are listed.

**Germ cell mutagenicity:**

Zinc Oxide: Hamster embryo unscheduled DNA synthesis.

Diatomaceous Earth: Negative results for mutagenicity.

**Reproductive toxicity:** No additional information.

**STOT-single and repeated exposure:** No additional information.

**Additional toxicological information:** No additional information.

### 12 Ecological information

**12.1 Toxicity:**

Sodium Phosphate: Fish, LC50: > 100 mg/L.

Zinc Oxide: Fish, *Oncorhynchus mykiss* (rainbow trout) - 1.1 mg/l - 96.0 h.

Diatomaceous Earth: Fish, 96-Hour LC50 greater than 100% v/v saturated solution.

Potassium Titanium Fluoride: Fish, LC50 96hr: 172.4 mg/L.

Zinc Oxide: Aquatic invertebrates, *Daphnia magna* (Water flea) - 0.098 mg/l - 48 h.

**12.2 Persistence and degradability:** No additional information.

**12.3 Bioaccumulative potential:** No additional information.

**12.4 Mobility in soil:** No additional information.

**General notes:** No additional information.

**12.5 Results of PBT and vPvB assessment:**

**PBT:** No additional information.

## Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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**Trade Name:** Kromatica Color-Changing Alginate

**vPvB:** No additional information.

**12.6 Other adverse effects:** No additional information.

### 13 Disposal considerations

**13.1 Waste treatment methods (consult local, regional and national authorities for proper disposal)**

**Relevant Information:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. (US 40CFR262.11).

### 14 Transport information

**14.1 UN Number:** None  
ADR, ADN, DOT, IMDG, IATA

**14.2 UN Proper shipping name:** None  
ADR, ADN, DOT, IMDG, IATA

**14.3 Transport hazard classes:**  
ADR, ADN, DOT, IMDG, IATA

<b>Class:</b>	None
<b>Label:</b>	None
<b>LTD. QTY:</b>	None

**US DOT**

**Limited Quantity Exception:** None

**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** None

**Hazard Class:** None

**Packing Group:** None

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** None

**Hazard Class:** None

**Packing Group:** None

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**14.4 Packing group:** None  
ADR, ADN, DOT, IMDG, IATA

**14.5 Environmental hazards :** Aquatic Toxicity.

**14.6 Special precautions for user:** None

<b>Danger code (Kemler):</b>	None
<b>EMS number:</b>	None
<b>Segregation groups:</b>	None

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

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### 14.8 Transport/Additional information:

<b>Transport category:</b>	None
<b>Tunnel restriction code:</b>	None
<b>UN "Model Regulation":</b>	None

### 15 Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

##### North American

#### SARA

**Section 313 (specific toxic chemical listings):**

1314-13-2 Zinc Oxide.

7601-54-9 Sodium Phosphate.

**Section 302 (extremely hazardous substances):**

7601-54-9 Sodium Phosphate.

#### CERCLA (Comprehensive Environmental Response, Clean up and Liability Act) Reportable

**Spill Quantity:** None of the ingredients are listed.

#### TSCA (Toxic Substances Control Act):

**Inventory:**

9005-36-1 Potassium Alginate.

7601-54-9 Sodium Phosphate.

68855-54-9 Diatomaceous Earth.

16919-27-0 Potassium Titanium Fluoride.

**Rules and Orders:** Not applicable.

#### Proposition 65 (California):

**Chemicals known to cause cancer:** None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:** None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:** None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:** None of the ingredients are listed.

#### Canadian

**Canadian Domestic Substances List (DSL):**

All ingredients are listed.

#### EU

**REACH Article 57 (SVHC):** None of the ingredients are listed.

**Germany MAK:** Not classified.

#### Asia Pacific

##### Australia

**Australian Inventory of Chemical Substances (AICS):** All ingredients are listed.

##### China

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**Inventory of Existing Chemical Substances in China (IECSC):** All ingredients are listed.

### Japan

**Inventory of Existing and New Chemical Substances (ENCS):** All ingredients are listed.

### Korea

**Existing Chemicals List (ECL):** All ingredients are listed.

### New Zealand

**New Zealand Inventory of Chemicals (NZOIC):** All ingredients are listed.

### Philippines

**Philippine Inventory of Chemicals and Chemical Substances (PICCS):** All ingredients are listed.

### Taiwan

**Taiwan Chemical Substance Inventory (TSCI):** All ingredients are listed.

## 16 Other information

### Abbreviations and Acronyms:

CAS Chemical Abstracts Service (division of the American Chemical Society).

TLV Threshold Limit Value.

TDG Transportation of Dangerous Goods.

TWA Time-Weighted Average.

VOC Volatile Organic Compound.

WEEL Workplace Environmental Exposure Limit (see AIHA).

vPvBs Very Persistent and Very Bioaccumulative substances.

STEL Short-Term Exposure Limit.

SNUR Significant New Use Rule (see TSCA).

NFPA National Fire Protection Association (USA).

N/A Not Applicable.

ACGIH American Conference of Governmental Industrial Hygienists.

PBTs Persistent, Bioaccumulative and Toxic substances.

PEL Permissible Exposure Limit.

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA Resource Conservation and Recovery Act (USA).

DOT US Department of Transportation.

HMIS Hazardous Materials Identification System (USA).

LC50 Median Lethal Concentration.

IATA International Air Transportation Association.

LD50 Median Lethal Dose.

n.o.s. Not Otherwise Specified.

TSCA Toxic Substances Control Act (USA).

### Summary of Phrases

#### Hazard statements:

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statements:

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Safety Data Sheet**

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

**Effective date:** 01.06.2016**Trade Name:** Kromatica Color-Changing Alginate

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P391 Collect spillage.

P501 Dispose of contents and container as instructed in Section 13.

**Manufacturer Statement:**

It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. The information contained herein is, to the best of our knowledge and belief, accurate. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 2-1-0**HMIS:** 2-1-0