

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product name** TANNIN REAGENT #1

**Other means of identification**

**Product Code(s)** 7833  
**UN-No** 3264

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Laboratory chemicals. Use as a laboratory reagent. Industrial (not for food or food contact use).

**Details of the supplier of the safety data sheet**

**Manufacturer Address**  
 LaMotte Company, Inc.  
 802 Washington Avenue  
 P.O. Box 329  
 Chestertown, MD 21620 USA  
 T 410-778-3100  
 F 410-778-9748

**Emergency telephone number**

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

## 2. HAZARDS IDENTIFICATION

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### EMERGENCY OVERVIEW

**DANGER**

**Hazard statements**

Harmful if swallowed. Causes severe skin burns and eye damage.



**Appearance** Clear yellow solution

**Physical state** liquid

**Odor** None

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statements - Response**

Immediately call a POISON CENTER or physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell, Rinse mouth, IF SWALLOWED, Do NOT induce vomiting

#### Precautionary Statements - Storage

Store locked up.

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

#### Other Hazards

Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium molybdate dihydrate	10102-40-6	2.5
Hydrochloric acid	7647-01-0	5
Phosphoric acid	7664-38-2	7
Sodium tungstate	13472-45-2	10

### 4. FIRST AID MEASURES

#### First Aid Measures

##### General advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

##### Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

##### Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Call a physician immediately.

##### Inhalation

Move to fresh air in case of accidental inhalation of vapors. Administer oxygen if breathing is difficult. Call a physician immediately.

##### Ingestion

Do NOT induce vomiting. Call a physician immediately. Drink plenty of water.

##### Self-protection of the first aider

Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.

#### Specific hazards arising from the chemical

Thermal decomposition can lead to release of toxic and corrosive gases/vapors.

#### Hazardous combustion products

Contact with metals may evolve flammable hydrogen gas.

**Sensitivity to Mechanical Impact**

Not Applicable

**Sensitivity to Static Discharge**

Not Applicable

**Protective equipment and precautions for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal precautions**

See section 8. Use personal protective equipment. Avoid contact with skin, eyes, and inhalation of vapors. Ensure adequate ventilation.

**Environmental precautions**

See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up****Methods for containment**

Absorb/Cover spill with sodium bicarbonate or sodium carbonate to neutralize, then place in a chemical waste container for later disposal.

**Methods for cleaning up**

Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE****Precautions for safe handling****Handling**

Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Prevent breathing of mist or vapors. Do not taste or swallow. Do not eat, drink, or smoke when using this product.

**Conditions for safe storage, including any incompatibilities****Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature in the original container. Store away from strong bases or metals. Keep away from heat.

**Incompatible Products**

Strong bases. Metals.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium molybdate dihydrate 10102-40-6	TWA: 0.5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup>
Hydrochloric acid 7647-01-0	Ceiling: 2 ppm	Ceiling 5 ppm (7mg/m <sup>3</sup> )	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>
Phosphoric acid 7664-38-2	3 mg/m <sup>3</sup> STEL TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Sodium tungstate 13472-45-2	3 mg/m <sup>3</sup> STEL (as W) TWA: 1 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>

NIOSH IDLH: *Immediately Dangerous to Life or Health***Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Gloves & Lab Coat.

**Respiratory protection** Use only with adequate ventilation.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid		
<b>Appearance</b>	Clear yellow solution	<b>Odor</b>	None

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
	pH	
	<1	No information available
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	
<b>Flash point</b>	No information available	
<b>Evaporation rate</b>		
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Water solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** Excessive heat. Incompatible products.

**Incompatible materials** Strong bases. Metals.  
**Hazardous decomposition products** Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium molybdate dihydrate 10102-40-6	= 4 g/kg ( Rat ) = 4000 mg/kg ( Rat )	Not Established	> 2080 mg/m <sup>3</sup> ( Rat ) 4 h
Hydrochloric acid 7647-01-0	238 - 277 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 1.68 mg/L ( Rat ) 1 h
Phosphoric acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2740 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h
Sodium tungstate 13472-45-2	= 1190 mg/kg ( Rat )	Not Established	Not Established

#### Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium molybdate dihydrate 10102-40-6	A3	Not Established	Not Established	Not Established
Hydrochloric acid 7647-01-0	Not Established	Group 3	Not Established	Not Established
Phosphoric acid 7664-38-2	Not Established	Not Established	Not Established	Not Established
Sodium tungstate 13472-45-2	Not Established	Not Established	Not Established	Not Established

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

**Chronic toxicity** Repeated or prolonged exposure may cause central nervous system damage.

**ATEmix (oral)** 1623  
**ATEmix (dermal)** 28910 mg/kg  
**ATEmix (inhalation-dust/mist)** 10.8 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Unknown Aquatic Toxicity** 88.37 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium molybdate dihydrate 10102-40-6	Not Established	Not Established	Not Established
Hydrochloric acid 7647-01-0	Not Established	282: 96 h Gambusia affinis mg/L LC50 static	Not Established
Phosphoric acid 7664-38-2	Not Established	3 - 3.5: 96 h Gambusia affinis mg/L LC50	4.6: 12 h Daphnia magna mg/L EC50
Sodium tungstate 13472-45-2	Not Established	Not Established	Not Established

### Persistence and degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Sodium molybdate dihydrate 10102-40-6	Not Established
Hydrochloric acid 7647-01-0	Not Established
Phosphoric acid 7664-38-2	Not Established
Sodium tungstate 13472-45-2	Not Established

### 13. DISPOSAL CONSIDERATIONS

**Disposal Methods** Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.

**Contaminated packaging** Do not reuse empty containers.

**US EPA Waste Number** D002 - Corrosive waste

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium molybdate dihydrate 10102-40-6	Not Established	-	Not Established	Not Established
Hydrochloric acid 7647-01-0	Not Established	-	Not Established	Not Established
Phosphoric acid 7664-38-2	Not Established	-	Not Established	Not Established
Sodium tungstate 13472-45-2	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium molybdate dihydrate 10102-40-6	Not Established	Not Established	Not Established	Not Established
Hydrochloric acid 7647-01-0	Not Established	Not Established	Not Established	Not Established
Phosphoric acid 7664-38-2	Not Established	Not Established	Not Established	Not Established
Sodium tungstate 13472-45-2	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Sodium molybdate dihydrate 10102-40-6	-
Hydrochloric acid 7647-01-0	-
Phosphoric acid 7664-38-2	-
Sodium tungstate 13472-45-2	-

### 14. TRANSPORT INFORMATION

**DOT**

**Proper shipping name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid/Phosphoric acid solution)  
**UN-No** 3264  
**Hazard Class** 8  
**Packing group** II  
**Reportable Quantity (RQ)** 5000lb for Hydrochloric acid, 5000lb Phosphoric acid

**IATA**

**Proper shipping name** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid/Phosphoric acid solution)  
**UN-No** 3264  
**Hazard Class** 8  
**Packing group** II

**IMDG/IMO**

<b>Proper shipping name</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid/Phosphoric acid solution)
<b>UN-No</b>	3264
<b>Hazard Class</b>	8
<b>Packing group</b>	II

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Does not comply
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Does not comply
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Sodium molybdate dihydrate 10102-40-6	Not Established
Hydrochloric acid 7647-01-0	1.0
Phosphoric acid 7664-38-2	Not Established
Sodium tungstate 13472-45-2	Not Established

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium molybdate dihydrate 10102-40-6	Not Established	Not Established	Not Established	Not Established
Hydrochloric acid 7647-01-0	5000 lb	Not Established	Not Established	X
Phosphoric acid	5000 lb	Not Established	Not Established	X

7664-38-2				
Sodium tungstate 13472-45-2	Not Established	Not Established	Not Established	Not Established

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Sodium molybdate dihydrate 10102-40-6	-	Not Established	-
Hydrochloric acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ
Phosphoric acid 7664-38-2	5000 lb	Not Established	RQ 5000 lb final RQ RQ 2270 kg final RQ
Sodium tungstate 13472-45-2	-	Not Established	-

**US State Regulations****California Proposition 65**

Chemical name	California Proposition 65
Sodium molybdate dihydrate 10102-40-6	Not Established
Hydrochloric acid 7647-01-0	Not Established
Phosphoric acid 7664-38-2	Not Established
Sodium tungstate 13472-45-2	Not Established

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium molybdate dihydrate 10102-40-6	Not Established	Not Established	Not Established
Hydrochloric acid 7647-01-0	X	X	X
Phosphoric acid 7664-38-2	X	X	X
Sodium tungstate 13472-45-2	Not Established	Not Established	Not Established

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances**

Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances
Hydrochloric acid 7647-01-0	Add POISON to label, 16 CFR 1500.129 (>=10%, free or chemically unneutralized)

**16. OTHER INFORMATION****NFPA**

Health hazard 3

Flammability 0

Instability 0

Physical and Chemical Hazards N/A

**HMIS**

Health hazard 3

Flammability 0

Stability 1





Health Hazard	<b>3</b>
Fire Hazard	<b>0</b>
Reactivity	<b>1</b>

Issuing Date Jun-01-2015  
Revision Date Jun-30-2015  
Reason for revision New US GHS format

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Material Safety Data Sheet**

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

Product name TANNIN REAGENT #2

**Other means of identification**

Product Code(s) 7834

**Recommended use of the chemical and restrictions on use**

Recommended Use Laboratory chemicals. Industrial (not for food or food contact use). Use as a laboratory reagent.

**Details of the supplier of the safety data sheet**

**Manufacturer Address**  
 LaMotte Company, Inc.  
 802 Washington Avenue  
 P.O. Box 329  
 Chestertown, MD 21620 USA  
 T 410-778-3100  
 F 410-778-9748

**Emergency telephone number**

24 Hour Emergency Number (CHEM-TEL): USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

## 2. HAZARDS IDENTIFICATION

Serious eye damage/eye irritation

Category 2

### EMERGENCY OVERVIEW

**WARNING**

**Hazard statements**

Causes serious eye irritation.



**Appearance** Clear, colorless

**Physical state** liquid

**Odor** Odorless

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection. Keep out of the reach of children.

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**Unknown Acute Toxicity**

1% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium carbonate	497-19-8	20

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>General advice</b>	Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Consult a physician if necessary.
<b>Inhalation</b>	Not expected to require first aid measures. Remove to fresh air.
<b>Ingestion</b>	Drink plenty of water. Clean mouth with water.
<b>Self-protection of the first aider</b>	Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), or foam.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	See section 8. Use personal protective equipment. Avoid contact with skin, eyes, and inhalation of vapors.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	Neutralize spill with acidic material (dilute acid); containerize, and hold for later disposal. If local regulations permit, dilute with water and rinse to drain with excess water. After cleaning, flush away traces with water.
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### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from strong acids. Keep out of the reach of children.

**Incompatible Products** Strong acids. Aluminium.

<b>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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**Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium carbonate 497-19-8	-	-	Not Established

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves/clothing.

**Respiratory protection** Maintain adequate ventilation.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>
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**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Odorless
<b>Appearance</b>	Clear, colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	11	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	

<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under normal conditions of use and storage.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Incompatible products.
<b>Incompatible materials</b>	Strong acids. Aluminium.
<b>Hazardous decomposition products</b>	Carbon oxides (COx). Sodium oxides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium carbonate 497-19-8	= 4090 mg/kg ( Rat )	Not Established	= 2300 mg/m <sup>3</sup> ( Rat ) 2 h

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium carbonate 497-19-8	Not Established	Not Established	Not Established	Not Established

**Chronic toxicity** None known.

**ATEmix (oral)** 20450

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium carbonate 497-19-8	242: 120 h Nitzschia mg/L EC50	310 - 1220: 96 h Pimephales promelas mg/L LC50 static 300: 96 h Lepomis macrochirus mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical name	Log Pow
Sodium carbonate 497-19-8	Not Established

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods** Dispose according to federal, state, and local regulations. If permitted, neutralize reagent to pH 7 with acid and rinse to drain with excess water.

**Contaminated packaging** Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium carbonate 497-19-8	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium carbonate 497-19-8	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Sodium carbonate 497-19-8	-

#### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

**TSCA** Complies  
**DSL/NDL** Does not comply  
**EINECS/ELINCS** Does not comply  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Does not comply  
**PICCS** Complies  
**AICS** Complies

##### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Sodium carbonate 497-19-8	Not Established

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium carbonate 497-19-8	Not Established	Not Established	Not Established	Not Established

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Sodium carbonate 497-19-8	-	Not Established	-

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

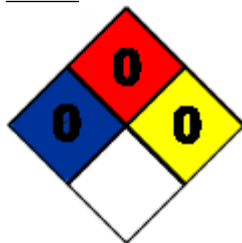
Chemical name	California Proposition 65
Sodium carbonate 497-19-8	Not Established

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium carbonate 497-19-8	Not Established	Not Established	Not Established

**CPSC (Consumer Product Safety Commission) - Specially Regulated Substances****16. OTHER INFORMATION**

<b>NFPA</b>	Health hazard 0	Flammability 0	Instability 0	Physical and Chemical Hazards N/A
<b>HMIS</b>	Health hazard 1	Flammability 0	Stability 0	



Health Hazard	1
Fire Hazard	0
Reactivity	0

Prepared by  
Issuing Date  
Disclaimer

Regulatory Affairs Department  
Jun-01-2015

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**