

Issue Date 18-Jan-2013

Revision Date 20-Jan-2015

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

**Product Code** 20740  
**Product Name** Crystal

### Other means of identification

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

Use only for the purpose on the product label.

### Details of the supplier of the safety data sheet

#### **Manufacturer / Manufactured For**

Seatex, Ltd.  
445 TX Hwy 36  
Rosenberg, TX 77471  
Phone: (800) 829-3020

### Emergency telephone number

**24 Hour Emergency Phone Number** 1-800-535-5053

## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Oral	Category 5
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

May be harmful if swallowed  
Causes severe skin burns and eye damage  
Toxic to aquatic life with long lasting effects



**Appearance** Colorless to Light Yellow

**Physical state** Liquid

**Odor** Odorless

#### **Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

**Precautionary Statements - Response**

Specific Treatment (See Section 4 on the SDS).

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.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation persists or burns occur, get medical attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. See a physician immediately.

**Precautionary Statements - Storage**

Store away from reactive metals and acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of the reach of children.

**Precautionary Statements - Disposal**

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

**Hazards not otherwise classified (HNOC)****Other Information**

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Weight-%	Trade Secret
Potassium Hydroxide	1310-58-3	10-30	*
Sodium Hypochlorite	7681-52-9	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures****Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. For severe burns, immediate medical attention is required.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice.

**Inhalation**

If mist or spray is inhaled, remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Ingestion**

Rinse mouth. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Self-protection of the first aider**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. 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.

**Most important symptoms and effects, both acute and delayed****Symptoms**

Causes severe skin burns and eye damage. Inhalation may cause irritation or burning to mucous membranes.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

**Hazardous combustion products** Will react with zinc and aluminum to form hydrogen gas, which may accumulate to explosive concentrations.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**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****Personal precautions**

Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

**Environmental precautions****Environmental precautions**

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Stop leak if safe to do so. Dilute spilled material with dilute acetic acid (vinegar) to less than pH of 10.

**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Do not mix with acids.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep/store only in original container. Do not reuse container. Keep out of the reach of children.

**Incompatible materials** Strong acids. Aluminum, zinc, or alloys containing them.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium Hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering Controls** Showers, Eyewash stations & Ventilation systems.

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

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene** When using do not eat, drink or smoke. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Take off all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** Liquid  
**Appearance** Colorless to Light Yellow  
**Odor** Odorless  
**Odor threshold** No Information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	12.0 - 13.0	1% solution
<b>Specific Gravity</b>	1.288	
<b>Viscosity</b>	No Information available	
<b>Melting point/freezing point</b>	No Information available	
<b>Boiling point / boiling range</b>	220 / ° F Degrees	
<b>Flash point</b>	N/A	
<b>Evaporation rate</b>	< 1	(butyl acetate = 1)
<b>Flammability (solid, gas)</b>	No Information available	
<b>Upper flammability limit:</b>	N/A	
<b>Lower flammability limit:</b>	N/A	
<b>Vapor pressure</b>	N/A	
<b>Vapor density</b>	N/A	
<b>Water solubility</b>	Complete	
<b>Partition Coefficient (n-octanol/water)</b>	No Information available	
<b>Autoignition temperature</b>	No Information available	
<b>Decomposition temperature</b>	No Information available	

**Other Information**

Density Lbs/Gal No Information available  
VOC Content (%) No Information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

Contact with metals may evolve flammable hydrogen gas.

**Conditions to avoid**

Elevated temperature.

**Incompatible materials**

Strong acids. Aluminum, zinc, or alloys containing them.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Hydrogen chloride. Phosgene. Oxides of carbon.

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

**Product Information** The primary effects and toxicity of this material are due to its corrosive nature.

**Inhalation** Causes burns.

**Eye contact** Corrosive to the eyes and may cause severe damage including blindness.

**Skin Contact** The product causes burns of eyes, skin and mucous membranes.

**Ingestion** Causes burns. May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Hydroxide 1310-58-3	= 284 mg/kg ( Rat )	-	-
Sodium Hypochlorite 7681-52-9	= 8200 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	-

**Information on toxicological effects**

**Symptoms** No Information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Corrosivity** Causes burns. Extremely corrosive and destructive to tissue. Risk of serious damage to eyes.

**Sensitization** May cause sensitization by inhalation and skin contact.

**Germ cell mutagenicity** No Information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium Hypochlorite 7681-52-9	-	Group 3	-	-

IARC (International Agency for Research on Cancer)

Not classifiable as a human carcinogen

**Reproductive toxicity** No Information available.

**STOT - single exposure** No Information available.

**STOT - repeated exposure  
Chronic toxicity**

No Information available.

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure.

**Target organ effects  
Aspiration hazard**

Possible risk of irreversible effects.

EYES, Respiratory system, Skin.

No Information available.

**Numerical measures of toxicity - Product Information****Unknown Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document .

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

2.23% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Potassium Hydroxide 1310-58-3	-	80: 96 h <i>Gambusia affinis</i> mg/L LC50 static	-
Tetrapotassium Pyrophosphate 7320-34-5	-	100: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50	100: 48 h water flea mg/L EC50
Sodium Hypochlorite 7681-52-9	0.095: 24 h <i>Skeletonema costatum</i> mg/L EC50	0.06 - 0.11: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 4.5 - 7.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 0.4 - 0.8: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 0.28 - 1: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 0.05 - 0.771: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 0.03 - 0.19: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 0.18 - 0.22: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	0.033 - 0.044: 48 h <i>Daphnia magna</i> mg/L EC50 Static 2.1: 96 h <i>Daphnia magna</i> mg/L EC50
Sodium Silicate 1344-09-8	-	301 - 478: 96 h <i>Lepomis macrochirus</i> mg/L LC50 3185: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static	216: 96 h <i>Daphnia magna</i> mg/L EC50
Tetrasodium EDTA 64-02-8	1.01: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	41: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 59.8: 96 h <i>Pimephales promelas</i> mg/L LC50 static	610: 24 h <i>Daphnia magna</i> mg/L EC50
Trisodium nitrilotriacetate 5064-31-3	560 - 1000: 96 h <i>Chlorella vulgaris</i> mg/L EC50	93 - 170: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 560 - 1000: 96 h <i>Oryzias latipes</i> mg/L LC50 semi-static 72 - 133: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 560 - 1000: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 560 - 1000: 96 h <i>Poecilia reticulata</i> mg/L LC50 114: 96 h <i>Pimephales promelas</i> mg/L LC50 175 - 225: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 252: 96 h <i>Lepomis macrochirus</i> mg/L LC50 470: 96 h <i>Pimephales promelas</i> mg/L LC50 static 560 - 1000: 96 h <i>Oryzias latipes</i> mg/L LC50	560 - 1000: 48 h <i>Daphnia magna</i> mg/L LC50

**Persistence and degradability**

No Information available.

**Bioaccumulation**

No Information available.

Chemical Name	Partition coefficient
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Potassium Hydroxide 1310-58-3	0.83
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**Other adverse effects** No Information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D002

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Potassium Hydroxide 1310-58-3	Toxic Corrosive

### 14. TRANSPORT INFORMATION

The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under 49 CFR, IATA and IMDG to assure regulatory compliance.

#### DOT

**DOT Proper Shipping name** UN1760, Corrosive liquid, n.o.s. (contains potassium hydroxide), 8, PG II

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<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>	Does not comply

#### 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.

##### SARA 311/312 Hazard Categories

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No

Sudden release of pressure hazard  
Reactive Hazard

No  
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
Potassium Hydroxide 1310-58-3	1000 lb	-	-	X
Sodium Hypochlorite 7681-52-9	100 lb	-	-	X

**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	Reportable Quantity (RQ)
Potassium Hydroxide 1310-58-3	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium Hypochlorite 7681-52-9	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

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

This product does not contain any Proposition 65 chemicals.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Potassium Hydroxide 1310-58-3	X	X	X
Sodium Hypochlorite 7681-52-9	X	X	X
Sodium Hydroxide 1310-73-2	X	X	-
Trisodium nitrilotriacetate 5064-31-3	-	X	-

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

**HMIS** Health hazards 3 Flammability 0 Physical hazards 0 Personal protection X

**Legend**

N/A - Not Applicable

N/E - Not Established

N/D - Not Determined

N/K - Not Known

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Revision Note New format

**Disclaimer**

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet