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# Safety Data Sheet

Issue Date: 11-17-14

Revision Date: 01-12-15

Version 1

## 1. IDENTIFICATION

**Product Identifier**

**Product Name** Crystal Clear 550

**Other means of identification**

**Product Code** 6014

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

**Recommended Use** Cleaning agent.

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

**Supplier Address**  
 Winsol Laboratories INC  
 1417 NW 51st ST  
 Seattle, WA 98107

**Emergency Telephone Number**

**Company Phone Number** 206-782-5500  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear liquid

**Physical State** Liquid

**Odor** Slightly acidic

**Classification**

|                                   |            |
|-----------------------------------|------------|
| Acute toxicity - Oral             | Category 4 |
| Acute toxicity - Dermal           | Category 4 |
| Skin corrosion/irritation         | Category 2 |
| Serious eye damage/eye irritation | Category 1 |

**Signal Word**

Danger

**Hazard Statements**

Harmful if swallowed  
 Harmful in contact with skin  
 Causes skin irritation  
 Causes serious eye damage



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

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: Wash with plenty of soap and water  
 Take off contaminated clothing and wash it before reuse  
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name     | CAS No    | Weight-% |
|-------------------|-----------|----------|
| Hydrofluoric acid | 7664-39-3 | <2       |
| Hydrochloric acid | 7647-01-0 | <2       |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.  |
| <b>Skin Contact</b> | Immediately flush with large quantities of cool water, while removing contaminated clothing and shoes, until all acid is removed, paying particular attention to skin under nails. Get medical attention. Follow by immersing affected part in ice-cold saturated solution of magnesium sulfate (Epsom salt). Wash contaminated clothing before reuse. |
| <b>Inhalation</b>   | Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.   |
| <b>Ingestion</b>    | Do not induce vomiting. Dilute by giving a large amount of water. Immediately follow with mineral oil or milk of magnesia. Get medical attention.  |

**Most important symptoms and effects**

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | Contact will cause irritation and redness to exposed areas. Blindness may occur. May cause irritation to the mucous membranes and upper respiratory tract. |
|-----------------|--|

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

|                           |                        |
|---------------------------|------------------------|
| <b>Notes to Physician</b> | 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** Not determined.

### Specific Hazards Arising from the Chemical

Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with the air.

### 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** Use personal protective equipment as required.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

### **Methods for Clean-Up**

Large spills should be collected by pumping into closed containers for recovery or disposal. For small spills, neutralize with sodium bicarbonate, soda ash, or dilute caustic soda solution. Flush area with water.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

### **Advice on Safe Handling**

Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Emptied container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

### Conditions for safe storage, including any incompatibilities

### **Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

### **Incompatible Materials**

Strong oxidizing agents. Acids. Aluminum, tin, zinc, bronze, and brass.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

| Chemical Name                  | ACGIH TLV  | OSHA PEL  | NIOSH IDLH   |
|--------------------------------|--|---|--|
| Hydrochloric acid<br>7647-01-0 | Ceiling: 2 ppm   | (vacated) Ceiling: 5 ppm<br>(vacated) Ceiling: 7 mg/m <sup>3</sup><br>Ceiling: 5 ppm<br>Ceiling: 7 mg/m <sup>3</sup>  | IDLH: 50 ppm<br>Ceiling: 5 ppm<br>Ceiling: 7 mg/m <sup>3</sup>   |
| Hydrofluoric acid<br>7664-39-3 | TWA: 0.5 ppm F TWA: 2.5 mg/m <sup>3</sup><br>F<br>S*<br>Ceiling: 2 ppm F | TWA: 3 ppm F TWA: 2.5 mg/m <sup>3</sup> F<br>TWA: 2.5 mg/m <sup>3</sup> dust<br>(vacated) TWA: 3 ppm F<br>(vacated) TWA: 2.5 mg/m <sup>3</sup><br>(vacated) STEL: 6 ppm F | IDLH: 30 ppm<br>Ceiling: 6 ppm 15 min<br>Ceiling: 5 mg/m <sup>3</sup> 15 min<br>TWA: 3 ppm<br>TWA: 2.5 mg/m <sup>3</sup> |

### Appropriate engineering controls

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

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

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

**Skin and Body Protection** Wear rubber or neoprene gloves.

**Respiratory Protection** Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                              |                    |                         |                 |
|------------------------------|--------------------|-------------------------|-----------------|
| <b>Physical State</b>        | Liquid             | <b>Odor</b>             | Slightly acidic |
| <b>Appearance</b>            | Clear liquid       | <b>Odor Threshold</b>   | Not determined  |
| <b>Color</b>                 | Clear              |                         |                 |
| <b>Property</b>              | <b>Values</b>      | <b>Remarks • Method</b> |                 |
| pH                           | Not determined     |                         |                 |
| Melting Point/Freezing Point | 0 °C / 32 °F       |                         |                 |
| Boiling Point/Boiling Range  | 100 °C / 212 °F    |                         |                 |
| Flash Point                  | Not available      |                         |                 |
| Evaporation Rate             | < 1                | (Ether = 1)             |                 |
| Flammability (Solid, Gas)    | n/a-liquid         |                         |                 |
| Upper Flammability Limits    | Not available      |                         |                 |
| Lower Flammability Limit     | Not available      |                         |                 |
| Vapor Pressure               | Not determined     |                         |                 |
| Vapor Density                | 10-30 mm Hg        | at 21.1 °C (70.0 °F)    |                 |
| Specific Gravity             | >1.1               | (1=Water)               |                 |
| Water Solubility             | Completely soluble |                         |                 |
| Solubility in other solvents | Not determined     |                         |                 |
| Partition Coefficient        | Not determined     |                         |                 |
| Auto-ignition Temperature    | Not determined     |                         |                 |
| Decomposition Temperature    | Not determined     |                         |                 |
| Kinematic Viscosity          | Not determined     |                         |                 |
| Dynamic Viscosity            | Not determined     |                         |                 |
| Explosive Properties         | Not determined     |                         |                 |
| Oxidizing Properties         | Not determined     |                         |                 |
| VOC Content                  | Not applicable     |                         |                 |



## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

Strong oxidizing agents. Acids. Aluminum, tin, zinc, bronze, and brass.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

#### Eye Contact

Causes serious eye damage.

#### Skin Contact

Causes skin irritation. Harmful in contact with skin.

#### Inhalation

Avoid breathing vapors or mists.

#### Ingestion

Harmful if swallowed.

### Component Information

| Chemical Name                  | Oral LD50           | Dermal LD50             | Inhalation LC50  |
|--------------------------------|---------------------|-------------------------|--|
| Hydrochloric acid<br>7647-01-0 | = 700 mg/kg ( Rat ) | > 5010 mg/kg ( Rabbit ) | = 3124 ppm ( Rat ) 1 h                                     |
| Hydrofluoric acid<br>7664-39-3 | -                   | -                       | = 850 mg/m <sup>3</sup> ( Rat ) 1 h = 1276 ppm ( Rat ) 1 h |

### Information on physical, chemical and toxicological effects

#### Symptoms

Please see section 4 of this SDS for symptoms.

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

#### Carcinogenicity

Not classifiable as a human carcinogen.

| Chemical Name                  | ACGIH | IARC    | NTP | OSHA |
|--------------------------------|-------|---------|-----|------|
| Hydrochloric acid<br>7647-01-0 |       | Group 3 |     |      |

#### Legend

*IARC (International Agency for Research on Cancer)*

*Group 3 IARC components are "not classifiable as human carcinogens"*

**Numerical measures of toxicity**

## Product Information

|                 |                            |
|-----------------|----------------------------|
| Oral LD50       | > 500 mg/kg                |
| Dermal LD50     | > 1000 mg/kg               |
| Inhalation LC50 | > 11.89 mg/L (aerosolized) |

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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

| Chemical Name                  | Algae/aquatic plants | Fish  | Toxicity to microorganisms | Crustacea                                     |
|--------------------------------|----------------------|---|----------------------------|---|
| Hydrochloric acid<br>7647-01-0 |                      | 282: 96 h <i>Gambusia affinis</i><br>mg/L LC50 static |                            |   |
| Hydrofluoric acid<br>7664-39-3 |                      | 660: 48 h <i>Leuciscus idus</i><br>mg/L LC50          |                            | 270: 48 h <i>Daphnia</i> species<br>mg/L EC50 |

**Persistence/Degradability**

Products are inherently biodegradable.

**Bioaccumulation**

This material is not expected to significantly bioaccumulate.

**Mobility**

The material is completely soluble in water

| Chemical Name                  | Partition Coefficient |
|--------------------------------|-----------------------|
| Hydrofluoric acid<br>7664-39-3 | -1.4                  |

**Other Adverse Effects**

Not determined

**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**

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

**US EPA Waste Number**

| Chemical Name                  | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|--------------------------------|------|--------------------------|------------------------|------------------------|
| Hydrofluoric acid<br>7664-39-3 | U134 |                          |                        | U134                   |

**14. TRANSPORT INFORMATION**

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated



## 15. REGULATORY INFORMATION

**International Inventories**

Not determined

**US Federal Regulations****CERCLA**

| Chemical Name                  | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                   |
|--------------------------------|--------------------------|----------------|--|
| Hydrofluoric acid<br>7664-39-3 | 100 lb                   | 100 lb         | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ  |
| Hydrochloric acid<br>7647-01-0 | 5000 lb                  | 5000 lb        | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

**SARA 313**

| Chemical Name                 | CAS No    | Weight-% | SARA 313 - Threshold Values % |
|-------------------------------|-----------|----------|-------------------------------|
| Hydrochloric acid - 7647-01-0 | 7647-01-0 | <2       | 1.0                           |
| Hydrofluoric acid - 7664-39-3 | 7664-39-3 | <2       | 1.0                           |

**CWA (Clean Water Act)**

| Component                           | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-------------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Hydrofluoric acid<br>7664-39-3 (<2) | 100 lb                      |                        |                           | X                          |
| Hydrochloric acid<br>7647-01-0 (<2) | 5000 lb                     |                        |                           | X                          |

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

| Chemical Name                  | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Hydrochloric acid<br>7647-01-0 | X          | X             | X            |
| Hydrofluoric acid<br>7664-39-3 | X          | X             | X            |

**16. OTHER INFORMATION**

|                    |                       |                     |                         |                            |
|--------------------|-----------------------|---------------------|-------------------------|----------------------------|
| <b><u>NFPA</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b>      | <b>Special Hazards</b>     |
|                    | Not determined        | Not determined      | Not determined          | Not determined             |
| <b><u>HMIS</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Physical Hazards</b> | <b>Personal Protection</b> |
|                    | 2                     | 0                   | 1                       | B                          |

Issue Date: 11-17-14  
Revision Date: 01-12-15  
Revision Note: New format

**Disclaimer**

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End of Safety Data Sheet