

Section 1 - Identification

Product Name: Rinker Surface Defense + 1g Tablet
Product Description: Disinfection
Product Type: Solid
Manufacturer Name: Rinker Products & Services
Address: 2500 W Mt. Houston Rd. Suite F
Houston, TX, 77038
Emergency Phone: 713-859-1000

Section 2 – Hazards Identification

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification of the substance: Skin Corrosion (Category 1B)
Acute toxicity Oral (Category 4)
Acute toxicity, Inhalation (Category 3)
Acute toxicity, Dermal (Category 3)
Serious eye damage (Category 1)
Acute Aquatic toxicity (Category 2)

GHS Hazard Symbols:



GHS Signal Word: Danger
Hazard Statements: H302 - Harmful if swallowed.
H312 Harmful in contact with skin
H331 Toxic if inhaled.
H314 Causes severe Skin Burns and eye damage.
H319 Causes Serious eye irritation.
H401 Toxic to aquatic life



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Precautionary Statements:

Prevention: P220 -Keep/Store away clothing /combustible material.
 P261- Avoid breathing dust/fume/gas/mist/vapors/spray.
 P273- Avoid release to the environment.
 P280- Wear protective gloves/protective clothing/eye protection/face protection.

Response: P302+350- IF ON SKIN: Gently wash with soap and water
 P304+340- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338 -IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P309+P311 -IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician.

Storage: P405- Store locked up

Disposal: P501- Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental Hazard Statements: none

Section 3 – Composition

| Ingredient | CAS No. | EINECS No. | Composition | GHSCLAS |
|--------------------|-----------|------------|-------------|---|
| Sodium Chlorite | 7758-19-2 | 231-836-6 | 10% | Ox. Sol.2 Acute Tox. 3* Acute Tox. 2* Acute Tox. 2* Skin Corr. 1B Aquatic Acute 1 H272 H301 H310 H330 H314 H400 |
| Citric acid | 77-92-9 | 201-069-1 | 8% | Eye Irrit. 2 H319 |
| Magnesium sulphate | 7487-88-9 | 231-298-2 | 8% | / |
| Sodium bisulfate | 7681-38-1 | 231-665-7 | 14% | Skin Corr. 1B Eye Dam. 1 H314 H318 |
| Sodium carbonate | 497-19-8 | 207-838-8 | 16% | Eye Irrit. 2 H319 |
| Sodium chloride | 7647-14-5 | 231-598-3 | 44% | / |



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Section 4 – First-Aid Measures

Description of first aid measures:

| | |
|----------------------------|---|
| Eye contact: | Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Occasionally lifting the upper and lower eyelids. Get medical attention if irritation occurs. |
| Skin contact: | Immediately wash skin with soap and copious amounts of water while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately. |
| Ingestion: | Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Loosen tight clothing such as a collar, tie, belt, or waistband. Get medical attention immediately. |
| Inhalation: | Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt, or waistband. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If irritation develops and persists, seek medical attention. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious, or corrosive. Seek immediate medical attention. |
| Notes to Physician: | Treat symptomatically |

Section 5 – Fire-Fighting Measures

Extinguishing media suitable: Use alcohol-resistant foam, dry chemical, or carbon dioxide

Special Hazards arising from the Substance or mixture: Under fire conditions toxic fumes may be released. Thermal decomposition can lead to release of irritating gases and vapors. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion. Keep product and empty



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container away from heat and sources of ignition. This chemical has strong oxidizing soluble in water.

Special protective fire-fighter actions:

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

Section 6 – Accidental Release Measures

Personal Precautions, protective equipment, and emergency procedures:

For non-emergency personnel:

Corrosive solid. If packages rupture. Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Spilled or released at long industrial condition: Remove ignition sources, keep away from heat and flame, evacuate area. Avoid dust formation. Avoid breathing dust. Shut off source of the leak only if it is easy to do so. Do not get water inside containers.

Environmental Precautions:

Keep spilled material out of sewers, ditches, and bodies of water. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up:

Sweep up and place in suitable containers for recycle or disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

Section 7 – Handling and Storage

Precautions for safe handling:

Protective measures:

Dust generated in handling of this product can be explosive if sufficient quantities are mixed in air. In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Avoid physical damage to the container. Ground



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and bond containers when transferring material. Take necessary action to avoid static electricity discharge. Do not eat, drink, or smoke while handling the product. Do not get water inside containers.

Conditions for safe storage, including any incompatibilities:

Keep away from heat and flame. Store in a cool, dry, well-ventilated away from incompatible substances and foodstuff containers. Store in a tightly closed container. Optimal efficacy of the product will be prolonged if Neutral Anolyte is stored away from direct sunlight and in sealed, airtight opaque or tinted glass containers.

Other precautions:

Keep out of the reach of children.

Section 8 – Exposure Controls/Personal Protection

Exposure limits/guidelines:

| Ingredient | CAS No. | OSHA TWA | NIOSH IDLH | Russia-STEL |
|--------------------|-----------|------------|------------|---------------------|
| Sodium Chlorite | 7758-19-2 | Not Listed | Not Listed | 1 mg/m ³ |
| Citric acid | 77-92-9 | Not Listed | Not Listed | 1 mg/m ³ |
| Magnesium sulphate | 7487-88-9 | Not Listed | Not Listed | 2 mg/m ³ |

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 concentration low.

Personal Protective Equipment:

Eye Protection:

Wear chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin Protection

Wear appropriate protective gloves.

Body Protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.



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Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9 – Physical and Chemical Properties

| | |
|---|---|
| Physical state: | Solid (Tablet) |
| Appearance: | Flake |
| Color: | white. |
| Odor: | Chlorine taste |
| pH: | No data available |
| Evaporate Rate: | No data available. |
| Flash point | No data available. |
| Flammability (Solid, gas): | No data available |
| Water Solubility: | Soluble, strong oxidizing soluble in water. |
| Boiling point: | No data available |
| Oxidation Reduction Potential ORP: | No data available |

Section 10 - Stability and Reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions:

Hazardous Polymerization: Will not Occur.

Hazardous reactions: None under normal processing

Conditions to Avoid: Incompatible materials. Exposure to moist air or water

Incompatible materials: Strong reducing agents, strong oxidizing agents, Acids, Alkali, Amines, Potassium nitrate, Powdered metals, Phosphorus, Sulphur compounds, Zinc, Ammonia, Organic materials.



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Hazardous decomposition products: May produce irritating and toxic fumes and gases. Carbon oxides, hydrogen chloride gas, Sulphur oxides, sodium oxides and so on.

Section 11 – Toxicological Information

Acute toxicity:

| Product/Ingredient | CAS No. | Result/Specie/Dose |
|--------------------|-----------|---|
| Sodium Chlorite | 7758-19-2 | Oral, mouse LD50=350 mg/kg Oral, rat: LD50= 165 mg/kg |
| Citric acid | 77-92-9 | Oral, mouse LD50=5040 mg/kg Oral, rat: LD50= 3 gm/kg |
| Sodium carbonate | 497-19-8 | Inhalation, mouse: LC50= 1200 mg/m ³ /2H Inhalation, rat: LC50= 2300 mg/m ³ /2H Oral, mouse LD50= 6600 mg/kg Oral, rat: LD50= 4090 gm/kg |
| Sodium chloride | 7647-14-5 | Oral, rat: LD50= 3000 mg/kg Skin, rabbit: LD50 > 10000 mg/kg Inhalation, rat: LD50> 42000 mg/ m ³ /1h |

Skin Corrosion/Irritation:

| Product/Ingredient | CAS No. | Result/Specie/Exposure |
|--------------------|-----------|---------------------------------------|
| Sodium Chlorite | 7758-19-2 | Skin-rabbit- Corrosive |
| Sodium carbonate | 497-19-8 | Skin-rabbit- Mild skin Irritation-24h |

Serious eye damage/eye irritation

| Product/Ingredient | CAS No. | Result/Specie/Exposure |
|--------------------|-----------|--|
| Sodium Chlorite | 7758-19-2 | Eyes-rabbit- Severe eye irritation- 24h |
| Sodium carbonate | 497-19-8 | Eyes-rabbit- Moderate eye Irritation-24h |

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available



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| | |
|---|---|
| Carcinogenicity: | Sodium chlorite- This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans. |
| Specific target organ toxicity: Aspiration hazard: | No data available No data available |
| <u>Potential Health Effects:</u> | |
| Eye: | Causes eye burns. Inflammation of the eye is characterized by redness, watering, and itching. Eye contact can result in corneal damage. |
| Skin: | May be harmful if absorbed through skin. Skin contact can produce inflammation (itching, reddening etc.) and blistering. Prolonged exposure may result in skin burns and ulcerations. |
| Ingestion: | Ingestion is an unlikely route of exposure; no hazard in normal industrial use. May be harmful if swallowed. Causes gastrointestinal tract irritation and burns. Symptoms may include nausea and vomiting. May cause severe and permanent damage to the digestive tract irritation and burns. Symptoms may include nausea and vomiting. May cause severe and permanent damage to the digestive tract. |
| Inhalation: | Toxic if inhaled. It is destructive to the mucous membranes of the upper respiratory tract. Causes irritation and chemical burns to the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath, and pulmonary edema. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Severe over-exposure can result in death. |
| Signs and Symptoms of Exposure | Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. |



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Section 12 – Ecological Information

| Product/Ingredient | CAS No. | Result/Specie/Dose |
|--------------------|-----------|---|
| Sodium Chlorite | 7758-19-2 | Fish: Cyprinodont variegatus (Sheepshead minnow): LC50 = 75 mg/1/96h Daphnia: Daphnia magna (Water flea): EC50 = 0.29 mg/l/48h |
| Citric acid | 77-92-9 | Fish: Leuciscus idus: LC50 = 440-760 mg/1/96h Daphnia: Daphnia magna (Water flea): EC50 = 14 mg/L/15 min |
| Sodium carbonate | 497-19-8 | Fish: Leuciscus idus: LC50 = 440-760 mg/1/96h Daphnia: Daphnia magna (Water flea): EC50 = 300 mg/l/96h |
| Sodium chloride | 7647-14-5 | Fish: Lepomis macrochirus LC50 = 265 mg/1/48h Daphnia: Daphnia magna (Water flea): LC50 = 1661 mg/l/48h |

Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Other adverse effects: Do not empty into drains.
Hazards: No know significant effects or critical hazards.






Section 13 – Disposal Considerations

Waste treatment methods

Waste from Residues: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Contaminate packaging: Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery, recycling, reuse) according to local legislation.

Section 14 – Transport Information

| | DOT | IMDG | IATA |
|-----------------------------------|--|---|--|
| UN number | UN 1759 | UN 1759 | UN 1759 |
| UN proper shipping name | Corrosive solid, n.o.s (Chlorine dioxide effervescent tablets). | Corrosive solid, n.o.s (Chlorine dioxide effervescent tablets). | Corrosive solid, n.o.s (Chlorine dioxide effervescent tablets). |
| Transport hazard class(es) | 8   | 8   | 8  |
| Packing group | II | II | II |
| Environmental hazards | Yes | Yes | No |

Special precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15 – Regulatory Information

This safety datasheet complies with the requirement of Regulation (EC) No. 1907/2006.

U.S. federal regulations

Toxic Substances Control Act (TSCA): All components of this product are listed on the TSCA inventory.

Canada:

All components of this product are listed on Canada's DSL List.



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Section 16 – Other Information

SDS Version: 1
SDS Version Date: Nov 04,2020

DISCLAIMER:

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Text of H-code(s) and R-phrase(s) mentioned in Section 3.

Ox. Sol. 2: Oxidizing solids (Category 2)

Skin Corr. 1B: Skin corrosion (Category 1B)

Acute Tox. 3*: Acute toxicity, Oral (Category 3)

Acute Tox. 2*: Acute toxicity, Inhalation (Category 2)

Acute Tox. 2*: Acute toxicity, Dermal (Category 2) Aquatic Acute 1: Acute aquatic toxicity (Category 1)

Eye Irrit. 2: Eye irritation (Category 2)

Eye Dam. I: Serious eye damage (Category 1)

H272 May intensify fire; oxidiser.

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

R8 Contact with combustible material may cause fire.

R22 Harmful if swallowed.

R24 Toxic in contact with skin.



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R26 Very toxic by inhalation.

R34 Causes burns.

R36 Irritating to eyes.

R41 Risk of serious damage to the eyes.

H50 Very toxic to aquatic organisms.

Other Information:

ACGIH: (American Conference of Governmental Industrial Hygienists); CAS: (Chemical Abstracts Service); DSL: (the Domestic Substances List of Canada) ; EC: (European Commission) ; IARC: (International Agency for Research on Cancer); IATA: (International Air Transport Association); IMDG: (International Maritime Dangerous Goods); ADR: (European Agreement Concerning the International Carriage of Dangerous Goods by Road); RID: (Regulations Concerning the International Carriage of Dangerous Goods by Rail); LD50: (Lethal dose, 50 percent kill) ; NDSL: (the Non-domestic Substances List of Canada) ; NIOSH: (US National Institute for Occupational Safety and Health) ;NTP: (US National Toxicology Program) ;OSHA: (US Occupational Safety and Health) ; PEL: (Permissible Exposure Level); REL: (Rec ended Exposure Limit); RTECS: (Registry of Toxic Effects of Chemical Substances) ; STEL : (Short Term Exposure Limit); TDG (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model regulations); TSCA: (Toxic Substances Control Act of USA) TWA: (Time Weighted Average); TLV: (Threshold Limit value).