

Attachment

Disinfectants and use methods for Cold chain food production and Management

Type of disinfectants	Useful ingredients	Application scope	Use method	note
Alcohol disinfectant	Ethanol 70% to 80% (V/V), alcohol-containing hand sanitizer >60% (V/V). Compounding products refer to product specifications.	Mainly used for hand and skin disinfection, disinfection of small surfaces.	Sanitary hand disinfection: evenly spray hands or rub hands for 1-2 times for 1min. Wipe the surface of the object twice for 3min	<ol style="list-style-type: none"> 1. Inflammable, away from the source of fire. 2. It is not suitable for disinfection of large surfaces
Fluorinated disinfectant	In terms of effective fluoride, the content is expressed in mg/L or %, bleaching powder \geq 20%, sodium dichloroisocyanurate \geq 55%, 84 disinfectant according to the product instructions, common is 2%-5%	It is suitable for disinfecting objects, fruits, vegetables and utensils. Hypochlorous acid disinfectants can also be used to disinfect the air, hands, skin and mucous membranes.	<ol style="list-style-type: none"> 1. For surface disinfection: use 500mg/L; For disinfection in the foci, 1000mg/L shall be used on the surface of the object, and 10,000mg /L shall be used when there are obvious pollutants; Air and other disinfection, refer to the product instructions. 2. Disinfect the surface of refrigerated objects at low temperature: use 1000mg/L; For disinfection in a foci, a 	<ol style="list-style-type: none"> 1. Corrosive to metals, bleaching and fading to fabrics, so metals and colored fabrics should be used with caution. 2. Strong oxidants shall not come into contact with inflammables and shall be kept away from the source of fire.

			<p>concentration of 2000mg/L shall be used on the surface of the object, and a concentration of 20000mg/L shall be used if there are obvious pollutants.</p> <p>3. Surface disinfection: The method of lowering the freezing point should be adopted to ensure that the disinfectant does not freeze, and the disinfection effect should be confirmed.</p>	
Perchloride disinfectant	<p>Hydrogen perchloride disinfectant: hydrogen peroxide (H₂O₂) mass fraction 3%-6%. Disinfectant peracetic acid: mass fraction of peracetic acid (C₂H₄O₃) is 15%-21%</p>	Apply to the object surface, air disinfection.	<p>1. Object surface: 0.1%-0.2% peracetic acid or 3% hydrogen peroxide. Spray or soak the disinfectant for 30min, then rinse with clean water to remove the residual disinfectant.</p> <p>2. Air disinfection: 0.2% peroxyacetic acid or 3% hydrogen peroxide, using</p>	<p>1. Inflammable and explosive products, in case of open fire, high heat will cause combustion explosion.</p> <p>2. There is a risk of combustion and explosion in contact with reducing agent or metal powder.</p>

			<p>aerosol spray method, the dosage was calculated as 10mL /m³ -20ml/ m³, and ventilation was performed after 60min of disinfection effect; Also, 15% peracetic acid can be used for heating and fumigation, with the dosage calculated at 7ml/ m³. After fumigation for 1h-2h, ventilation is required.</p> <p>3. Disinfect the surface of objects in low temperature refrigeration; Spray or soak the disinfectant for 30min, and then rinse with clean water to remove the residual disinfectant.</p> <p>4. Surface disinfection of frozen objects: The method of lowering the freezing point should be adopted to ensure that the disinfectant does not freeze, and the disinfection</p>	
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			effect should be confirmed.	
Quaternary ammonium salt disinfectant	Refer to product specification	Suitable for surface disinfection of objects	<p>1. Surface disinfection: when there are no obvious pollutants, use 1000mg/L; When there are significant pollutants, use 2000mg/L.</p> <p>2. Disinfect the surface of objects in low temperature refrigeration: when there are no obvious pollutants, use 2000mg/L; When there are significant pollutants, use a concentration of 4000 mg/L</p> <p>3. Surface disinfection of frozen objects: The method of lowering the freezing point should be adopted to ensure that the disinfectant does not freeze, and the disinfection effect should be confirmed</p>	It should not be used with soap or other anionic detergents, nor with iodine or peroxide (e.g., potassium permanganate, hydrogen peroxide, sulfonamide powder, etc.).

