

An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

Creation Date: 11-05-2025 Revision Date: 17-10-2030

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Ringer's solution

Product Code: R 1341

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification
OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,

Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email info@ottokemi.com

1.4. Emergency telephone number

Phone no.: + 91 22 2207 0099 (9:00am - 6:00 pm)

SECTION 2: Composition and Information on Ingredients

SUBSTANCE NAME	CONCENTRATION
Sodium Chloride	<1%
Calcium Chloride	<1%
Magnesium Sulfate	<1%
Sodium Phosphate, anhydrous, dibasic	1-2%
Potassium Chloride	<1%
Potassium Phosphate	<1%
Sodium Bicarbonate	<1%
Water	>97%

SECTION 3: Hazards Identification

Classification of the substance or mixture

This material is not considered to be hazardous.

Target organs: None known.

Other hazards: This material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200) if used properly.

SECTION 4: First Aid Measures

Description of first aid measures:

Inhalation: Remove to fresh air. If not breathing, give artificial respiration.

Skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Ingestion: Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink. Induce vomiting immediately.

SECTION 5: Fire and Explosion Data

When heated to decomposition, emits acrid fumes.

Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire. Firefighters should wear full fire-fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product



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SECTION 6: Accidental Release Measures

Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Contain spill with sand or absorbent material and place in sealed bag or container for disposal. Ventilate and wash spill area after pickup is complete. See Section 13 for disposal information.

SECTION 7: Handling and Storage

Precautions for safe handling

Handling: Use with adequate ventilation and do not breathe dust or vapour. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.

Storage: Store in General Storage Area [Green Storage] with other items with no specific storage hazards. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

SECTION 8: Exposure Controls/Personal Protection

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Exposure guidelines: Contains no materials with established exposure guidelines

SECTION 9: Physical and Chemical Properties

Physical state and appearance : Clear colorless liquid.

Odor : No odor. Taste : Not available. Molecular Weight : Not available. Color : Not available. pH (1% soln/water) · Not available **Boiling Point** : Not available. Melting Point Not available. Critical Temperature Not available. Specific Gravity 1.00 g/mL @ 20°C Vapor Pressure Not applicable. Vapor Density Not available. Volatility Not available. Odor Threshold : Not available. Water/Oil Dist. Coeff. : Not available.

Dispersion Properties
Solubility

SECTION 10: Stability and Reactivity Data

Stability: The product is stable under normal storage conditions.

Instability Temperature: Not available.

Conditions to avoid: Not available.

Incompatibility with various substances: Not available.

Materials to avoid: Not available.

Special Remarks on Reactivity: Not available. Special Remarks on Corrosivity: Not available. Hazardous decomposition products: Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

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SECTION 12: Ecological Information

Ecotoxicity (aquatic and terrestrial): Not considered an environmental hazard.

BOD5 and COD: Not available.

Persistence - degradability: Not established. Bioaccumulative potential: Not established.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

Results of PBT and vPvB assessment: Not established.

Environmental precautions: Not established

SECTION 13: Disposal Considerations

Waste Disposal: Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

SECTION 14: Transport Information

Land transport (ADR-RID)

General information : Not regulated.

Sea transport (IMDG) [English only]

General information : Not regulated.

Air transport (ICAO-IATA) [English only]

General information : Not regulated

SECTION 15: Other Regulatory Information

EINECS: Not Listed.

WHMIS Canada: Not WHMIS Controlled.

TSCA: All components are listed or are exempt.

California Proposition 65: Not listed.

The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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