Safety Data Sheet

R2J-1002

1. IDENTIFICATION

Product Name: R2J-1002 **Revised:** 09/08/2025
Description: Clear, light yellow to tan liquid with characteristic odor
Recommended Use: Cooling Water Treatment
Restrictions on Use: For industrial use only. Not acceptable for use in potable water or in food processing cooling systems where direct contact with foodstuff is intended.

COMPANY IDENTIFICATION
R2J Chemical Services, LLC.
3750 70th Ave. N, Suite B.
PINELLAS PARK, FL 33781

PHONE NUMBER: 727-531-4135

EMERGENCY PHONE NUMBERS
CHEMTEL 1-800-255-3924
Outside USA 1-813-248-0585

2. HAZARD(S) IDENTIFICATION

GHS Classification:
Serious eye damage/irritation - Category 1
Skin corrosion/irritation - Category 1C
Specific target organ toxicity, single exposure - Category 1
Specific target organ toxicity, single exposure - Category 1

Signal Word: Danger

Symbol(s):

Hazard Statements:
Causes severe skin burns and eye damage.
Causes damage to digestive system if swallowed.
Causes damage to respiratory system if inhaled.

Precautionary Statements:
Prevention
Do not breathe dusts or mists. Do not get in eyes, on skin, or on clothing. Wash hands, forearms, gloves and contaminated surfaces thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/eye protection/face protection.

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 CONTROL CENTER or doctor for treatment advice.
IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. Specific treatment (see First Aid on SDS or on this label).
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CONTROL CENTER or doctor for treatment advice.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CONTROL CENTER or doctor for treatment advice.

Storage
Store locked up.

Disposal
Dispose of contents/container in accordance with local, regional, national and international regulations.

Hazards Not Otherwise Classified: None Known.

Percentages of Components with Unknown Acute Toxicity:
Inhalation: 23%

3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL INGREDIENTS	CAS NO.*	PERCENT (%)**
POTASSIUM HYDROXIDE	1310-58-3	2% - 13%
POLYPHOSPHATE SALT	7320-34-5	8% - 18%
ACRYLIC TERPOLYMER	151006-66-5	M
SODIUM GLUCONATE	527-07-01	L

Legend: L=<1%; M=1-10%; H=>10%

*** Exposure limit and regulatory information in Sections 8 & 15**
**** Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.**

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with a directed stream of cool, clear water for at least 30 minutes. Forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Do not allow individual to rub their eyes. Get medical attention urgently, preferably from an ophthalmologist. Do not transport the victim until the recommended flushing period is completed, unless a portable emergency eye wash bottle is immediately available.

Skin Contact: Immediately wash skin with soap and plenty of water while removing contaminated clothing, for at least 15-20 minutes. Call a poison control center or doctor for treatment advice. Do not take contaminated clothing home to be laundered. Shoes and other leather items which cannot be decontaminated should be disposed of properly. Suitable emergency safety shower facility should be immediately available.

Inhalation: Remove victim to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek medical attention. If not breathing, give artificial respiration via a suitable mechanical device such as a bag and mask. Do not use mouth-to-mouth resuscitation.

Ingestion: Do not induce vomiting. Rinse mouth with copious quantities of water first and get immediate medical attention. Drink several glasses of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep airways clear.

Note to Physician: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

Most Important Symptoms/Effects:

Eye Contact: May cause severe irritation or burns. Prolonged contact may cause irreversible damage and/or blindness.

Skin Contact: Prolonged contact may cause severe irritation, rash or burns. Severity is generally determined by concentration of solution and duration of contact.

Inhalation: Inhalation of vapor or mist can cause severe irritation of nose, throat, and lungs. May cause damage to the upper respiratory tract and lungs under severe conditions.

Ingestion: May be toxic. May cause severe irritation or burns of the mouth, throat, and internal tissues resulting in possible nausea and/or vomiting. Large amounts can result in acute toxic effects which may be fatal.

Indication of Immediate Medical Attention and Special Treatment, if Necessary:
Other than acute, none known. See section 11 for toxicological information.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Any media suitable for the surrounding fire.

Specific Hazards Arising from the Chemical: Product is corrosive to eyes, skin, and respiratory system. Closed containers may rupture (due to buildup of pressure) when exposed to extreme heat. If evaporated to dryness, some product residuals may burn. Thermal decomposition may release oxides of carbon and nitrogen.

Special Protective Equipment and Precautions for Fire-Fighters: Wear self-contained breathing apparatus and full turn-out gear. Approach fire from upwind direction. If possible, move containers away from fire. Cool fire exposed containers with water spray. If containers rupture or leak, product may evolve irritating or toxic gas under extreme heat. Contain runoff.

6. ACCIDENTAL RELEASE MEASURES

Spill Containment and Clean-up Instructions:

Wear suitable protective equipment found in section 8. Small spills may be flushed with copious quantities of water, preferably to a sanitary sewer or waste treatment facility. Larger spills may be absorbed in sawdust or other absorbent and sweepings disposed of in an approved landfill. The area may then be flushed with copious quantities of water. Floor may be slippery; use care to avoid falling. Avoid release of this product into the environment to prevent contamination of soil, sewers, natural waterways and/or groundwater. See Section 12 for Ecological Information.

7. HANDLING AND STORAGE

Handling and Storage:

Store in a cool, dry, well ventilated area, between 10°C and 49°C. Keep containers tightly closed when not in use and follow all recommended safety precautions when handling the material. Keep out of sun and away from heat or open flame. Keep away from incompatible materials. See Section 10 for incompatible materials.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: General ventilation expected to be satisfactory

PERSONAL PROTECTION EQUIPMENT

Respiratory: Not normally required unless misting occurs. Wear an OSHA or NIOSH approved respirator.

Eyes and Face: Chemical resistant goggles or face shield.

Hands and Skin: Chemical resistant rubber, neoprene latex or PVC

Other Protective Equipment: Eyewash station in area of use. Wear long sleeve shirt, long pants, and boots. Handle in accordance with good industrial hygiene and safety practice.

EXPOSURE GUIDELINES

Exposure Limits:

COMPONENT	**TLV**
POTASSIUM HYDROXIDE	2mg/m³/15M

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Clear, light yellow to tan liquid with characteristic odor		
Odor Threshold:	N.D.	**Vapor Pressure:**	N.A.
pH (undiluted**):**	> 13.0	**Vapor Density:**	<1
Freeze Point:	N.D.	**Specific Gravity**(@22ºC)**:**	1.190 - 1.206
Boiling Point:	> 100ºC (212ºF)	**Solubility in Water:**	Complete
Flash Point:	N.D.	**Partition Coefficient:**	N.D. (n-octanol/water)
		Auto-Ignition Temperature:	N.D.
Evaporation Rate:	1.0	**Decomposition Temperature:**	N.D.
Flammability (solid, gas)**:**	No	**Viscosity:**	N.D.
Flammable Limits in Air:	**LFL –** N.A.		
	UFL – N.A.		

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive at normal temperatures and pressure.

Chemical Stability: Stable under normal conditions

Possibility of Hazardous Reactions: Will not occur under normal conditions.

Conditions to Avoid: Avoid excessive heat, sparks or open flames.

Incompatible Materials: Concentrated acids or oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may release oxides of carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION

Ingestion Testing: Rat, LD50: 2,840 mg/kg*

Skin Testing: Rabbit, LD50: > 5,000 mg/kg*

Inhalation Testing: None established for this product.

*Calculated based on GHS acute toxicity formula.

CHRONIC TOXICITY DATA

Sensitization Testing: None established for this product.

Other Testing: None established for this product.

Routes of Exposure: Eyes, Ingestion, Inhalation, Skin.

Eye Contact: May cause severe irritation or burns. Prolonged contact may cause irreversible damage and/or blindness.

Skin Contact: Prolonged contact may cause severe irritation, rash or burns. Severity is generally determined by concentration of solution and duration of contact.

Inhalation: Inhalation of vapor or mist can cause severe irritation of nose, throat, and lungs. May cause damage to the upper respiratory tract and lungs under severe conditions.

Ingestion: May be toxic. May cause severe irritation or burns of the mouth, throat, and internal tissues resulting in possible nausea and/or vomiting. Large amounts can result in acute toxic effects which may be fatal.

Medical Conditions Aggravated by Exposure: None known.

Chronic Effects from Repeated Overexposure: Other than short term effects, none established.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity Data:
Invertebrate: Daphnia magna, EC50/48hr: 462 mg/l*
Fish: Rainbow trout, LC50/96hr: 548 mg/l*
*Calculated based on GHS acute aquatic toxicity formula.

Product Fate Data: None established for this product.

Biodegradation Data: None established for this product.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with local, regional, national and international regulations. Contact the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Container Disposal: Triple rinse container (or equivalent) promptly after emptying and offer for reconditioning if appropriate. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal.

14. TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT) INFORMATION
UN/NA ID Number: UN3266
Proper Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS POTASSIUM HYDROXIDE)
Hazard Class: 8
Packing Group: PGII

VESSEL TRANSPORT (IMO/IMDG)
UN/NA ID Number: UN3266
Proper Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS POTASSIUM HYDROXIDE)
Hazard Class: 8
Packing Group: PGII
Marine Pollutant: No

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA: All ingredients listed or exempt from listing.
CERCLA and/or SARA RQ:
Reportable Quantity: POTASSIUM HYDROXIDE (CAS#1310-58-3) - 1000lbs. (455 kg)
SARA Section 302 Hazard Class: No ingredients listed in this section.
SARA Section 311/312 Chemicals:
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No
SARA Section 313 Chemicals: No ingredients listed in this section.

STATE REGULATIONS
This product does not contain any ingredients known to the State of California to cause cancer.

16. OTHER INFORMATION

HAZARD RATING SUMMARY

Hazard Rating System:	**NFPA**	**CODE TRANSLATION**
Health:	2	**0 = Minimal Hazard**
Flammability:	0	**1 = Slight Hazard**
Reactivity:	0	**2 = Moderate Hazard**
Special:		**3 = Severe Hazard**
		4 = Extreme Hazard

Other Precautions: This product has been designed for use in specific types of cooling water circuits and should be used only in accordance with the instructions provided by the technical representative servicing the facility. It may not be used for the treatment of potable water.

SDS REVISION SUMMARY

Revised Date	**Revision Notes**
09/08/2025	GHS Version 1.0: Supersedes: 8/7/25

ABBREVIATION CODE SUMMARY

N.A. – Not Applicable
N/A – Not Available
N.D. – Not Determined
N.E. – None Established

Disclaimer: The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.