



1. Product and Company Identification

Product Code: 4680
Product Name: RAO
 Revision: 04/20/2023
 Supersedes Revision: 08/24/2017

Manufacturer Information: PDQ Manufacturing, Inc.
 201 Victory Circle
 Ellijay, GA 30540
Phone Number: (706)636-1848

Web site address: www.pdqonline.com

Emergency Contact: Chemtrec (800)424-9300 / 24 Hr.
 Leak, Spill, Exposure, Fire, Accident

Supplier Name and Address: **Phone Number:**

2. Hazards Identification

Skin Corrosion/Irritation, Category 1A



GHS Signal Word: **Danger**

GHS Hazard Phrases: H314 - Causes severe skin burns and eye damage.

GHS Precaution Phrases: P264 - Wash hands thoroughly after handling.
 P280 - Wear protective gloves and eye protection.

GHS Response Phrases: P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or physician for treatment advice. Have product container or label with you when calling poison control center or physician.
 P310 - Immediately call a POISON CENTER or doctor/physician.
 P321 - Specific treatment see section 4 of this SDS.
 P363 - Wash contaminated clothing before reuse.

GHS Storage and Disposal Phrases: P405 - Store locked up.
 P501 - Dispose of contents/container via local/regional/national/international regulation.

Potential Health Effects (Acute and Chronic): Prolonged or repeated eye contact may cause conjunctivitis.
 Prolonged or repeated skin contact may cause dermatitis.
 Effects may be delayed.

Inhalation: Harmful if inhaled.

Skin Contact: Causes severe burns with delayed tissue destruction. Causes redness and pain. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Eye Contact: Causes severe eye burns. May cause irreversible eye injury.

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Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-58-3	Potassium hydroxide {Caustic potash}	< 5.0 %
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	<35.0 %
66669-53-2	Tetrasodium hydrogen 2-phosphonatobutane-1,2,4-tricarboxylate	< 5.0 %

4. First Aid Measures

Emergency and First Aid

Procedures:

In Case of Inhalation:	Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid.
In Case of Skin Contact:	Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Discard contaminated clothing in a manner which limits further exposure. Destroy contaminated shoes.
In Case of Eye Contact:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed.
In Case of Ingestion:	Never give anything by mouth to an unconscious person. Get medical aid immediately. If victim is fully conscious, give a cupful of water.

5. Fire Fighting Measures

Flash Pt:	NP	Method Used: Estimate
Explosive Limits:	LEL: No data.	UEL: No data.
Autoignition Pt:	NP	
Suitable Extinguishing Media:	Use dry sand or earth to smother fire. Use extinguishing media appropriate to surrounding fire conditions. Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.	
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn.	
Flammable Properties and Hazards:	No data available.	

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:	Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section.
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7. Handling and Storage

Precautions To Be Taken in Handling:	Wash thoroughly after handling. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Discard contaminated shoes. Avoid ingestion and inhalation.
Precautions To Be Taken in Storing:	Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Keep away from metals. Keep away from acids.

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8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1310-58-3	Potassium hydroxide {Caustic potash}	No data.	CEIL: 2 mg/m ³	No data.
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	PEL: 2 mg/m ³	CEIL: 2 mg/m ³	No data.
66669-53-2	Tetrasodium hydrogen 2-phosphonatobutane-1,2,4-tricarboxylate	No data.	No data.	No data.

Respiratory Equipment (Specify Type): Respirator protection is not normally required.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): There are no special ventilation requirements. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. Physical and Chemical Properties

Physical States:	[] Gas [X] Liquid [] Solid	
Appearance and Odor:	Mild odor. Dark brown liquid	
Freezing Point:	~ 40.00 F - 0.00 F	
Boiling Point:	0.00 C - 0.00 C	
Autoignition Pt:	NP	
Flash Pt:	NP Method Used: Estimate	
Explosive Limits:	LEL: No data.	UEL: No data.
Specific Gravity (Water = 1):	~ 1.460	
Vapor Pressure (vs. Air or mm Hg):	No data.	
Vapor Density (vs. Air = 1):	No data.	
Evaporation Rate:	No data.	
Solubility in Water:	Complete	
Viscosity:	Thin	
pH:	> 12.5	
Percent Volatile:	No data.	

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability: No specific conditions to avoid noted.

Incompatibility - Materials To Avoid: Acids, Sulfur oxides. Metals. Aluminum, Zinc, nitromethane, leather, organic halogens.

Hazardous Decomposition or Byproducts: Oxides of potassium, hydrogen gas. Toxic fumes of sodium oxide.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

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Conditions To Avoid - Product will not undergo polymerization.

Hazardous Reactions:

11. Toxicological Information

Toxicological Information: No data available.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
1310-58-3	Potassium hydroxide {Caustic potash}	n.a.	n.a.	n.a.	n.a.
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	n.a.	n.a.	n.a.	n.a.
66669-53-2	Tetrasodium hydrogen 2-phosphonatobutane-1,2,4-tricarboxylate	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

No data available.

13. Disposal Considerations

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide, Sodium hydroxide)

DOT Hazard Class: 8 CORROSIVE

UN/NA Number: UN3266

Packing Group: II



15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-58-3	Potassium hydroxide {Caustic potash}	No	Yes 1000 LB	No
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	No	Yes 1000 LB	No
66669-53-2	Tetrasodium hydrogen 2-phosphonatobutane-1,2,4-tricarboxylate	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
1310-58-3	Potassium hydroxide {Caustic potash}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
66669-53-2	Tetrasodium hydrogen 2-phosphonatobutane-1,2,4-tricarboxylate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

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16. Other Information

Revision Date: 04/20/2023
Preparer Name: Regulatory Affairs

Hazard Rating System:	HEALTH	2
	FLAMMABILITY	0
	REACTIVITY	2
	PPE	B

HMIS:

Additional Information About This Product: No data available.

Company Policy or Disclaimer:

The information contained in this Safety Data Sheet is provided pursuant to current OSHA regulations to convey information concerning the hazardous nature of the named product. The information supplied was compiled from the most reliable sources available at the time of preparation and in light of the most reasonable foreseeable exposure situations expected from the intended use of this product. The material(s) may present greater or lesser hazard exposure under other circumstances that are beyond the control of the manufacturer. Therefore it is imperative that all directions and warnings on the product label be read and closely followed.