

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07

Date of issue: 05/08/2025

Revised on 05/08/2025

1 Identification

- **Product Identifier**
- **Trade Name: Regenerant for Glyphosate Cation exchange (K+) Column**
- **Other means of identification**
- **Product Number:** RG019
- **Relevant identified uses of the substance or mixture and uses advised against:**
No further relevant information available.
- **Product Description:** Column Regenerant For Ion-exchange Glyphosate Column
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Pickering Laboratories, Inc.
1280 Space Park Way
Mountain View, CA 94043
Phone: (650) 694-6700
Fax: (650) 968-0749
www.pickeringlabs.com
support@pickeringlabs.com
- **Emergency telephone number:**
Clean Harbors Environmental Services
1-800-645-8265

* 2 Hazard(s) Identification

- **Classification of the substance or mixture:**
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.
- **Label elements:**
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material
- **Unknown acute toxicity:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.
- **Information pertaining to particular dangers for man and environment:**
- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Hazard(s) not otherwise classified (HNOC):** None known
- **Classification according to (d)(1)(ii) of § 1910.1200**
The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

(Contd. on page 2)

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· **Hazards not otherwise classified**

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

* **3 Composition/Information on Ingredients**

· **Non-hazardous components:**

Non-Hazardous components or components below reportable threshold.	100%
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· **Chemical characterization: Substance**

· **Description:**

Non-Regulated Material
Mixture of substances listed with non-hazardous additions and/or components that are less than listing threshold. All non-hazardous, components listed under threshold, and listed component total 100%.

· **Dangerous Components:** Non-Regulated Material

· **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

* **4 First-Aid Measures**

· **Description of first aid measures**

· **General information:** If symptoms persist, call a physician.

· **After inhalation:** Not anticipated under normal use.

· **After skin contact:**

Immediately wash with 1% acetic acid (or vinegar) to neutralize, followed with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. For chemical burns, apply sterile bandage securely but not to tightly. Seek medical assistance.

Generally, the product does not irritate the skin.

If skin irritation occurs, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water.

If eye irritation occurs, consult a doctor.

· **After swallowing:**

Give water freely and/or 1% acetic acid (or vinegar) followed by milk. Do not induce vomiting. Get medical assistance immediately.

If swallowed and symptoms occur, consult a doctor.

· **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

* **5 Fire-Fighting Measures**

· **Extinguishing media**

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** No further relevant information.

· **Special hazards arising from the substance or mixture:** No further relevant information available.

· **Advice for firefighters**

· **Special protective equipment for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

* **6 Accidental Release Measures**

· **Personal precautions, protective equipment and emergency procedures:** Not required.

(Contd. on page 3)

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- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the collected material according to regulations.

· PAC-1:		
1310-58-3	Potassium Hydroxide	0.18 mg/m ³
· PAC-2:		
1310-58-3	Potassium Hydroxide	2 mg/m ³
· PAC-3:		
1310-58-3	Potassium Hydroxide	54 mg/m ³

- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

- **Precautions for safe handling:**
Avoid contact with skin, eyes and clothing
Avoid breathing fumes.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in dry conditions at a temperature range of 8°C - 25°C.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Control parameters:**
- **Components with occupational exposure limits:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Appropriate engineering controls** No further data; see section 7.
- **Personal protective equipment**
- **General protective and hygienic measures:**
Use adequate exhaust ventilation to prevent inhalation of product vapors.
Do not eat or drink while handling product.
The usual precautionary measures for handling chemicals should be followed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:**
Respiratory protection is not required unless handling of the material produces nuisance airborne concentrations.
- **Protection of hands:** Not required.
- **Material of gloves:** Latex or vinyl
- **Penetration time of glove material:** Not applicable.

(Contd. on page 4)

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· Eye protection:



Goggles recommended during refilling.

· Body protection: Lab coat

· Limitation and supervision of exposure into the environment: None

* 9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Physical state Liquid

· Color: Colorless

· Odor: Odorless

· Odor threshold: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: ≥ 100 °C (≥ 212 °F)

· Flammability: Not applicable.

· Explosion limits:

· Lower: Not determined.

· Upper: Not determined.

· Flash point: None

· Auto igniting: Not applicable

· Decomposition temperature: Not determined.

· pH-value @ 20 °C (68 °F): 11.8

· Viscosity:

· Kinematic: Not determined.

· Dynamic: Not determined.

· Solubility in / Miscibility with:

· Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Vapor pressure @ 20 °C (68 °F): ≤ 23 hPa (≤ 17.3 mm Hg)

· Vapor pressure:

· Density @ 20 °C (68 °F): 1.0003 g/cm³ (8.3475 lbs/gal)

· Relative density: Not determined.

· Vapor density: Not determined.

· Particle characteristics Not applicable.

· Other information:

· Appearance:

· Form: Liquid

· Important information on protection of health and environment, and on safety.

· Ignition temperature: Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

· Change in condition

· Evaporation rate: Not determined.

10 Stability and Reactivity

· Reactivity: No further relevant information available.

· Chemical stability: Product is stable under normal conditions.

(Contd. on page 5)

Safety Data Sheet

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- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:**
Keep away from strong acids. Primary and secondary amines will cause non-hazardous contamination of this solution.
- **Hazardous decomposition products:** No dangerous decomposition products known.

*** 11 Toxicological Information**

- **Information on toxicological effects:**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** No data available.
- **Primary irritant effect:**
- **On the skin:** Mild irritant effect.
- **On the eye:** Mild irritant effect.
- **Additional toxicological information:**
- **Interactive effects** No interactive effects between components are known.

- **Carcinogenic categories:**

<ul style="list-style-type: none"> · IARC (International Agency for Research on Cancer):
None of the ingredients are listed.

<ul style="list-style-type: none"> · NTP (National Toxicology Program):
None of the ingredients are listed.

<ul style="list-style-type: none"> · OSHA-Ca (Occupational Safety & Health Administration):
None of the ingredients are listed.

- **Alternative sources for toxicological information**
No non-standard sources for toxicological information where used.

12 Ecological Information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:**
- **Additional ecological information:**
- **General notes:**
Generally not hazardous for water.
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal Considerations

- **Waste treatment methods**
- **Recommendation:**
Do not allow product to reach sewage system.

(Contd. on page 6)

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This product may be mixed with a combustible solvent and burned in a chemical incinerator equipped with an afterburner and scrubber. This product can also be sent to an EPA approved waste disposal facility. Observe all federal, state and local environmental regulations when disposing of this material.

- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

- **UN-Number:** Non-Regulated Material
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:** Non-Regulated Material
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **Special precautions for user:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
No further relevant information available.
- **SARA (Superfund Amendments and Reauthorization):**

· Section 355 (extremely hazardous substances):
None of the ingredients are listed.
· Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.
· TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.
· Hazardous Air Pollutants
None of the ingredients are listed.
· California Proposition 65:
· Chemicals known to cause cancer:
None of the ingredients are listed.
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.
· Chemicals known to cause reproductive toxicity for males:
None of the ingredients are listed.
· Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

(Contd. on page 7)

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· New Jersey Right-to-Know List:	
1310-58-3	Potassium Hydroxide
· New Jersey Special Hazardous Substance List:	
1310-58-3	Potassium Hydroxide CO, R1
· Pennsylvania Right-to-Know List:	
1310-58-3	Potassium Hydroxide
· Pennsylvania Special Hazardous Substance List:	
1310-58-3	Potassium Hydroxide E
· Carcinogenic categories:	
· EPA (Environmental Protection Agency):	
None of the ingredients are listed.	
· TLV (Threshold Limit Value established by ACGIH):	
None of the ingredients are listed.	
· NIOSH-Ca (National Institute for Occupational Safety and Health):	
None of the ingredients are listed.	
<ul style="list-style-type: none"> · GHS label elements Non-Regulated Material · Hazard pictograms: Non-Regulated Material · Signal word: Non-Regulated Material · Hazard statements: Non-Regulated Material 	
· National regulations:	
The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.	
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of previous version** 03/08/2021
- **Version number of previous version:** 11
- **Date of preparation** 05/08/2025
- **Abbreviations and acronyms:**
 - ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 - ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - NFPA: National Fire Protection Association (USA)
 - HMS: Hazardous Materials Identification System (USA)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety and Health
 - OSHA: Occupational Safety & Health Administration
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit



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REL: Recommended Exposure Limit

· *** Data compared to the previous version altered.**

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