

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/830 and US OSHA HCS 2015

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

- 1.1 Product Code:** Z-STOLLER203
Product Name: STOLLER 2-0-3
Trade Name: STOLLER 2-0-3
Synonyms: Nitrogen and Potassium fertilizer solution.
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant identified uses: Fertilizer Solution
- 1.3 Details of the Supplier of the Safety Data Sheet:**
- | | | |
|--------------------------|--|---|
| Company Name: | Stoller
9090 Katy Freeway
Suite 400
Houston, TX 77024 | Phone Number:
1 (713)461-1493 |
| | United States of America | |
| Web site address: | www.stollerusa.com | |
| Email address: | compliance@stollerusa.com | |
| Information: | | 1 (800)539-5283 |
- 1.4 Emergency telephone number:**
- | | | |
|---------------------------|-------------------------------------|------------------|
| Emergency Contact: | CHEMTREC, In the US and Canada call | 1 (800)424-9300 |
| | CHEMTREC, From other countries call | +1 (703)527-3887 |

Section 2. Hazards Identification

- 2.1 Classification of the Substance or Mixture:**
Serious Eye Damage/Eye Irritation, Category 2B
Acute Toxicity: Skin, Category 5
Acute Toxicity: Inhalation, Category 5
Acute Toxicity: Oral, Category 4

2.2 Label Elements:



GHS Signal Word: **Warning**

Hazard-determining components of labelling:

Potassium hydroxide

GHS Hazard Phrases:

H302 - Harmful if swallowed.

H313 - May be harmful in contact with skin.

H320 - Causes eye irritation.

H333 - May be harmful if inhaled.

GHS Precautionary Phrases:

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

GHS Response Phrases:

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P330 - Rinse mouth.

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P337+313 - If eye irritation persists, get medical advice/attention.

GHS Storage and Disposal Phrases:

P501 - Dispose of contents/container to permitted waste facility.

UFI:

2.3 Adverse Human Health Chronic: Not known. Expected toxicity hazard: slight to moderate.

Effects and Symptoms:

- 2.3.1 Inhalation:** Prolonged exposure to vapors may cause sore throat and irritation of respiratory tract.
- 2.3.2 Skin Contact:** May cause discomfort, skin irritation or rash unless treated promptly.
- 2.3.3 Eye Contact:** Contact with product may cause mild to severe irritation, blurred vision.
- 2.3.4 Ingestion:** May cause malaise, nausea. Large doses may cause gastrointestinal pains or cramps.

Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
1310-58-3 TT2100000	Potassium hydroxide 01-2119487136-33	<10.0 %	215-181-3 019-002-00-8	Acute Tox.(O) 4: H302 Skin Corr. 1A: H314
57-13-6 YR6250000	Urea 01-2119463277-33	<10.0 %	200-315-5 NA	No GHS classifications apply.

Section 4. First Aid Measures

- 4.1 Description of First Aid Measures:** Victims of severe exposure to chemicals must be taken to health providing centers for medical attention. If necessary, also rescuers must be attended. Always bring with victim a copy of label and SDS of product to health professional.
- In Case of Inhalation:** Move patient to fresh air. Supplemental oxygen may be needed. Assure mucous does not obstruct airways. Seek medical attention if victim's breathing becomes difficult.
- In Case of Skin Contact:** Immediately wash affected area with abundant soap and water. Remove contaminated clothing, taking care not to impregnate eyes. Seek medical attention if irritation occurs.
- In Case of Eye Contact:** Holding eyelids apart, immediately flush eyes with running water for at least 15 minutes. Seek medical attention if severe irritation occurs.
- In Case of Ingestion:** Immediately contact a physician or poison control center for treatment advice. Victim should drink milk, egg whites or large quantities of water and be induced to vomiting. Never give anything by mouth to someone who is unconscious, having convulsions or unable to swallow.
- Note for the Doctor:** Symptomatic treatment.

Section 5. Fire Fighting Measures

- 5.1 Suitable Extinguishing Media:** Use all means adequate to fight surrounding fire: water, foam, CO2, dry chemicals, etc.
- 5.2 Flammable Properties and Hazards:** Toxic fumes may be generated under fire conditions, or by contact with incompatible materials.
No data available.
- Flash Pt:** N.A.
- Explosive Limits:** LEL: N.A. UEL: N.A.
- Autoignition Pt:** N.A.
- 5.3 Fire Fighting Instructions:** None specific for this product, however, it is suggested that firefighters wear self-contained breathing apparatus (SCBA) and full protective equipment, such as chemical resistant clothing.

Section 6. Accidental Release Measures

- 6.1 Protective Precautions, Protective Equipment and Emergency Procedures:** In case of a large spill, protect people by clearing and isolating the affected area. Such releases should be responded to by trained personnel using pre-planned procedures. In the event of an incidental release, minimum Personal Protective Equipment must be worn: latex or rubber gloves and boots, goggles or full face-shield and coveralls or long-sleeved shirt and pants.
- 6.2 Environmental Precautions:** No data available.
- 6.3 Methods and Material For Containment and Cleaning Up:** It is necessary to contain the spill into the smallest area possible by diking, scooping, shoveling, etc., and recover liquid into an appropriate container for salvage or later use, labeling it accordingly. If product is clean, use it as intended, following original label directions; should it get contaminated, salvage for proper disposal as waste. Absorb residual product onto dry carrier such as dirt, sand or any other absorbent material, then put in covered, labeled containers and dispose of as dry waste in accordance with Federal, State and Local waste disposal regulations.

Section 7. Handling and Storage

- 7.1 Precautions To Be Taken in Handling:** All personnel who handle this material should be trained to work with it safely. Avoid breathing vapors or mist; use in well-ventilated location. Wear appropriate protective equipment. Empty containers may contain residual liquid or vapors and therefore should be handled the same as full containers. Product must be kept in its original container, if repackaging for any reason, use vented caps.
- 7.2 Precautions To Be Taken in Storing:** Inspect all incoming containers before storage to ensure all are properly labeled and not damaged. Store in a cool, dry place, away from direct sunlight, sources of intense heat or where freezing is possible. Store away from food, feed, clothing materials and living quarters. Keep away from reach of children and pets. Whenever possible, place chemicals on secondary containers or diked area. Keep containers tightly closed when not in use.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
1310-58-3	Potassium hydroxide	ACGIH TLV	TLV: 2 mg/m ³ CEIL: 2 mg/m ³	
		France VL	STEL: 2.0 mg/m ³	
		Britain EH40	STEL: 2 mg/m ³ ()	
57-13-6	Urea	ACGIH TLV	TLV: 10 mg/m ³	

Derived No-Effect Levels / Predicted No Effect Concentrations:

1310-58-3 Potassium hydroxide

DNEL Worker	Value	Remarks
Acute - Inhalation, local effects	1.000 mg/m ³	Behavioral Effects.
Acute - Inhalation, local effects	1.000 mg/m ³	Behavioral Effects.

Recommended Exposure Limits:

No occupational exposure limits have been established for this mixture.

8.2 Exposure Controls:

- 8.2.1 Engineering Controls (Ventilation etc.):** General ventilation is usually adequate. Local exhaust should be used if needed for safe, comfortable working conditions. An eye bath and washing facilities should be readily available.

8.2.2 Personal protection equipment:

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: Impervious gloves.

Other Protective Clothing: Long-sleeved shirt, long pants and protective shoes should be worn as a good safety practice.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Use a NIOSH/OSHA or European Standard EN 149 approved respirator if irritation or other symptoms are experienced.

Work/Hygienic/Maintenance Practices: As a general rule, do not eat, drink, smoke, and/or chew gum or tobacco when handling chemicals. Wash thoroughly after handling this product. Remove all dirty or contaminated clothing and wash it before reusing.
No data available.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Translucent, clear to slightly colored.
Slight, vinegar-like odor.

pH: 4 - 6

Melting Point: N.A.

Boiling Point: N.E.

Flash Pt: N.A.

Evaporation Rate: Similar to water

Saturated Vapor Concentration: N.E.

Flammability (solid, gas): Product is non-flammable.

Explosive Limits: LEL: N.A. UEL: N.A.

Vapor Pressure (vs. Air or mm Hg): N.E.

Vapor Density (vs. Air = 1): N.E.

Specific Gravity (Water = 1): 1.15 - 1.19

Density: 1.1744 G/ML (9.8 - LB/GA)

Bulk density: ~ 1.1744 G/ML (~ 9.8 - LB/GA)

Solubility in Water: Soluble

Octanol/Water Partition Coefficient: N.E.

Autoignition Pt:	N.A.
Decomposition Temperature:	N.E.
Viscosity:	N.E.
9.2 Other Information	
Percent Volatile:	N.D.
Molecular Formula & Weight:	Proprietary 0.0

Section 10. Stability and Reactivity

10.1 Reactivity:	N.A.
10.2 Stability:	Unstable [<input type="checkbox"/>] Stable [<input checked="" type="checkbox"/>]
10.3 Conditions To Avoid -	None known.
Hazardous Reactions:	
Possibility of Hazardous Reactions:	Will occur [<input type="checkbox"/>] Will not occur [<input checked="" type="checkbox"/>]
10.4 Conditions To Avoid -	High heat. Mixture with incompatible materials.
Instability:	
10.5 Incompatibility -	Not known.
Materials To Avoid:	
10.6 Hazardous Decomposition or Byproducts:	Ammonia gas.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects:	<p>Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans. However, they are being investigated as mutagenic agents.</p> <p>Embryotoxicity: The components of this product are not reported to produce embryotoxic effects in humans.</p> <p>Teratogenicity: The components of this product are not reported to produce teratogenic effects in humans.</p> <p>Reproductive Toxicity: The components of this product are not reported to produce toxic reproductive effects in humans. However, urea is being investigated as a reproductive effector.</p> <p>CAS# 1310-58-3: Acute toxicity, LD50, Oral, Rat, 273.0 MG/KG. Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors. Liver: Tumors. ; Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 8,97, 1987</p>
Carcinogenicity/Other Information:	No component is listed as a carcinogenic by IARC, NTP, OSHA, and ACGIH.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

- 12.1 Toxicity:** The available data on this material does not indicate any undue hazard to the environment under anticipated use and storage. All work practices must be aimed at eliminating environmental contamination. Any waste due to spillage or leakage should be contained and disposed of accordingly, see above under Section 6 "Accidental Release Measures."
- 12.2 Persistence and Degradability:** No data available.
- 12.3 Bioaccumulative Potential:** No data available.
- 12.4 Mobility in Soil:** No data available.
- 12.5 Results of PBT and vPvB assessment:** No data available.
- 12.6 Other adverse effects:** No data available.

Section 13. Disposal Considerations

- 13.1 Waste Disposal Method:** Waste disposal must be done following all Federal, State and Local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local waste regulatory authority.

Section 14. Transport Information

- 14.1 LAND TRANSPORT (US DOT):**
DOT Proper Shipping Name: Not Regulated. Trade Name: STOLLER 2-0-3
DOT Hazard Class:
UN/NA Number:
- 14.1 LAND TRANSPORT (European ADR/RID):**
ADR/RID Shipping Name:
UN Number:
Hazard Class:
- 14.2 MARINE TRANSPORT (IMDG/IMO):**
IMDG/IMO Shipping Name: Not Regulated. Trade Name: STOLLER 2-0-3
UN Number: Packing Group:
Hazard Class:
- 14.3 AIR TRANSPORT (ICAO/IATA):**
ICAO/IATA Shipping Name: Not Regulated. Trade Name: STOLLER 2-0-3
UN Number: Packing Group:
Hazard Class:
- Additional Transport Information:** Reportable Quantity: N.A.
Placards / Markings: N.A.
Emergency Response Guide Number: N.A.

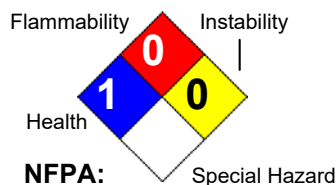
Section 15. Regulatory Information

Regulatory Information: TSCA Inventory: In compliance with inventory requirements for commercial purposes.

Section 16. Other Information

Revision Date: 07/15/2020

Hazard Rating System:



Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

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