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1. Product and Company Identification

Product Code: Z-AMPLIFYRQ

Product Name: AMPLIFY
Trade Name: AMPLIFY

Company Name: Stoller Phone Number: 9090 Katy Freeway 1 (713)461-1493

Suite 400

Houston, TX 77024

Web site address: www.stollerusa.com

Email address: compliance@stollerusa.com

Emergency Contact: CHEMTREC, In the US and Canada call 1 (800)424-9300

CHEMTREC, From other countries call +1 (703)527-3887

Information: 1 (800)539-5283

Synonyms: Chelated micronutrient solution.

2. Hazards Identification

Skin Sensitization, Category 1 Respiratory Sensitization, Category 1B Carcinogenicity, Category 1A Toxic To Reproduction, Category 2



GHS Signal Word: Danger

GHS Hazard Phrases: H317 - May cause an allergic skin reaction.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H350 - May cause cancer.

H361 - Suspected of damaging fertility or the unborn child .

GHS Precautionary Phrases: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P281 - Use personal protective equipment as required.

P285 - In case of inadequate ventilation wear respiratory protection.

GHS Response Phrases: P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P308+313 - IF exposed or concerned: Get medical attention/advice.

P321 - Specific treatment see ... on this label.

P333+313 - If skin irritation or rash occurs, seek medical advice/attention.
P342+311 - If experiencing respiratory symptoms call a POISON CENTER or

doctor/physician.

P363 - Wash contaminated clothing before reuse.

GHS Storage and Disposal P405 - Store locked up.

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

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Acute: Depending on the duration of contact, overexposure can irritate the eyes, skin, Potential Health Effects

(Acute and Chronic): mucous membranes and any other exposed tissue.

Chronic: Expected toxicity hazard: slight Not known. Expected toxicity hazard: slight.

Inhalation: May be harmful if inhaled.

Skin Contact: May cause discomfort, skin irritation or rash unless treated promptly. **Eye Contact:** Contact with product may cause redness, slight to severe eye irritation.

May cause malaise, nausea, burning sensation in stomach, and stomach cramps. Ingestion:

3. Composition/Information on Ingredients

CAS#	Components (Chemical Name)	Concentration	RTECS #
1314-13-2	Zinc oxide	< 1.5 %	ZH4810000
7758-99-8	Copper(II) sulfate	< 2.4 %	GL8900000
7758-94-3	Ferrous chloride	< 1.0 %	NO5400000
10043-35-3	Boric acid	< 2.5 %	ED4550000
10101-97-0	Nickel(II) sulfate hexahydrate	< 0.5 %	QR9600000
17863-38-6	ethanol, 2-amino-2-hydroxy-1,2,3-propanetricarboxylate	<15.0 %	NA

4. First Aid Measures

Emergency and First Aid

Procedures:

Victims of severe exposure to chemicals must be taken to health providing centers for medical attention. 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.

Wipe off product and immediately wash affected area with abundant soap and water. In Case of Skin Contact:

Remove contaminated clothing taking care not to impregnate eyes. Seek medical

attention if irritation occurs.

Holding eyelids apart, immediately flush eyes with copious amounts of clean water for at In Case of Eye Contact:

least 15 minutes. Seek medical attention should severe irritation occur.

In Case of Ingestion: Immediately contact a physician or poison control center for treatment advice. Victim

> should drink large quantities of water, milk or egg whites. DO NOT INDUCE VOMITING unless instructed otherwise by medical personnel. Never give anything by mouth to

anyone who is unconscious, having convulsions or unable to swallow.

Note to Physician: Symptomatic treatment.

5. Fire Fighting Measures

N.A. Flash Pt:

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

N.A. **Autoignition Pt:**

Suitable Extinguishing Media: Use all means adequate to fight surrounding fire: water, foam, CO2, dry chemicals, etc.

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.

Flammable Properties and

Hazards:

Toxic fumes under fire conditions.

Hazardous Combustion

No data available.

Products:

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6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: In case of a large spill, clear the affected area and protect people. 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 rubber boots, goggles or full face-shield and coveralls or long-sleeved shirt and pants. If product is clean, use it as intended, following original label directions; should it get contaminated, salvage for proper disposal as waste.

Steps To Be Taken In Case Material Is Released Or Spilled: It is necessary to contain the spill into the smallest area possible by diking, scooping, etc., and place recovered liquid into an appropriate container, labeling it accordingly. Absorb residual product onto dry carrier such as wood shavings, sand or any other absorbent material, and collect in covered, labeled containers and dispose of as dry waste in accordance with Federal, State and Local waste disposal regulations.

7. Handling and Storage

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. Empty containers may contain residual liquid or vapors, therefore, should also be handled with care.

Precautions To Be Taken in Storing:

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. Whenever possible, place chemicals on secondary containers or diked area. Inspect all incoming containers before storage to ensure all are properly labeled and not damaged. Keep containers tightly closed when not in use.

8. Exposure Controls/Personal Protection

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1314-13-2	Zinc oxide	PEL: 5 mg/m³ (fume); 15 mg/m³	TLV: 2 mg/m³ (resp.) STEL: 10 mg/m³ (resp.)	No data.
7758-99-8	Copper(II) sulfate	No data.	TLV: 1 mg/m³ as Cu	No data.
7758-94-3	Ferrous chloride	No data.	TLV: 1 mg/m³ as Fe	No data.
10043-35-3	Boric acid	No data.	TLV: 2 mg/m³	No data.
10101-97-0	Nickel(II) sulfate hexahydrate	No data.	TLV: 5 mg/m³ as Mo	No data.
17863-38-6	ethanol, 2-amino-2-hydroxy-1,2,3-propanetricar boxylate	No data.	No data.	No data.

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.

Wear a NIOSH/OSHA approved respirator if working conditions require doing so.

Eye Protection: Safety glasses should be worn in any type of operation with chemicals.

Protective Gloves: Wear appropriate gloves to prevent skin exposure.

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

practice.

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.

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.

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9. Physical and Chemical Properties						
Physical States:	[] Gas [X] Liquid [] Solid					
Appearance and Odor:	Green color. Very slight characteristic odor.					
рН:	8.0 - 10.0					
Melting Point:	No data.					
Boiling Point:	No data.					
Flash Pt:	N.A.					
Evaporation Rate:	Not available					
Flammability (solid, gas):	Product is non-flammable.					
Explosive Limits:	LEL: N.A. UEL: N.A.					
Vapor Pressure (vs. Air or mm Hg):	Not available					
	Not available					
Vapor Density (vs. Air = 1):	Not available					
Specific Gravity (Water = 1):	1.18 - 1.22					
Density:	~ 10.0 LB/GA					
Solubility in Water:	No data.					
Saturated Vapor Concentration:	Not available					
Octanol/Water Partition Coefficient:	N.E.					
Autoignition Pt:	N.A.					
Decomposition Temperature:	No data.					
Viscosity:	Not available					
Molecular Formula & Weight:	Proprietary 0.0					
Information with regard to primary physical hazard:						
10. Stability and Reactivity						
Reactivity:	Reactivity in water: N.A.					
Stability:	Unstable [] Stable [X]					
Conditions To Avoid -	Stable under normal condition, but avoid extreme heat and contact with incompatible					
Instability:	materials.					
Incompatibility - Materials To Avoid:	Not established.					
Hazardous Decomposition or Byproducts:	May produce toxic fumes under fire conditions.					
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]					
Conditions To Avoid - Hazardous Reactions:	None known.					

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11. Toxicological Information

Toxicological Information:

Not enough data for this particular solution.

CAS# 1314-13-2: Acute toxicity, TCLo, Inhalation, Human, 600.0 MG/M3. Result: Lungs, Thorax, or Respiration: Cough. Lungs, Thorax, or Respiration:Other changes.; Journal of Industrial Hygiene., For publisher

information, see AEHLAU, Cambridge, MA, Vol/p/yr: 9,88, 1927

Acute toxicity, LD50, Oral, Mouse, 7950. MG/KG. Result: Kidney, Ureter, Bladder:Urine volume increased. Nutritional and Gross Metabolic: Changes in: Sodium. Nutritional and Gross Metabolic:Changes in:K.; Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul.

B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 51(4),89, 1986

CAS# 7758-99-8: Acute toxicity, LD50, Oral, Rat, 300.0 MG/KG. Result: Behavioral: Altered sleep time (including change in righting reflex). Behavioral: Change in motor activity (specific assay). Behavioral: Antipsychotic.; "Agricultural Chemicals," 1976/77 revision, Thomson, W.T., 4 vols., Thomson Publications, Fresno, CA, Vol/p/yr: 2,182,

1977

CAS# 10043-35-3: Acute toxicity, LD50, Oral, Rat, 2660. MG/KG. Result:

Gastrointestinal:Hypermotility, diarrhea. Gastrointestinal:Nausea or vomiting. ; Journal of the American Medical Association, American Medical Association, 535 N. Dearborn

St., Chicago, IL 60610, Vol/p/yr: 128,266, 1945

Carcinogenicity/Other

Information:

Not enough data for this particular solution.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological
Information:

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." May be toxic to fish due to its copper component. Due to its nutrient value, may contribute to eutrophication in bodies of water. To aid our customers in complying with regulatory requirements, SARA Title III hazard categories for this product are indicated in Section 15. If the word "YES" is marked next to any category, this product may be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details.

13. Disposal Considerations

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.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated by DOT (49CFR §171.4) for packages of less than 45 gallons. Trade

Name: AMPLIFY

DOT Hazard Class:

UN/NA Number: Packing Group: |||

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Additional Transport DOT:

Information: Not regulated by DOT (49CFR §171.4) in containers less than 45 gallons. Containers 45

gallons (170.7 L) and larger reach the threshold limit for Reportable Quantity (RQ) of

10lb for Cupric Sulfate. Trade Name: AMPLIFY

IATA:

For packages less than 45 gallons (170.7 L): Not Regulated. Trade Name: AMPLIFY

Placards / Markings:

Not required as per 49CFR §172.504(f)(9) for domestic transportation. Miscellaneous 9 and Marine Pollutant for international transportation. "Limited Quantity" for packages with inner containers of less than 5 L each.

Emergency Response Guide Number: 171

15. Regulatory Information

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

CAS#	Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1314-13-2	Zinc oxide	No	No	Yes-Cat. N982
7758-99-8	Copper(II) sulfate	No	No	Yes-Cat. N100
7758-94-3	Ferrous chloride	No	Yes NA	No
10043-35-3	Boric acid	No	No	No
10101-97-0	Nickel(II) sulfate hexahydrate	No	No	Yes-Cat. N495
17863-38-6	ethanol, 2-amino-2-hydroxy-1,2,3-propanetricarboxylate	No	No	No

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

16. Other Information

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Hazard Rating System:



Health NFPA: Special Hazard

Instability

Flammability

HMIS:

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

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