Safety Data Sheet

Issue Date: 10-Nov-2015 Revision Date: 22-Nov-2015 Version 1

1. IDENTIFICATION

Product Identifier

Product Name Stress Master

Other means of identification

SDS # VLS-157

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer.

Details of the supplier of the safety data sheet

Supplier Address Quest Products 11712 230th St.

Linwood, KS 66052

Company Phone Number Business Phone: (785) 542-2577

Fax Phone: (785) 542 2531

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid Physical State Liquid

Classification

Acute toxicity - Oral Category 4

Signal Word Warning

Hazard Statements

Harmful if swallowed



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

<u>Precautionary Statements - Response</u>

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Phosphorous acid	13598-36-2	30-40
Potassium hydroxide	1310-58-3	20-30

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation occurs.

Skin Contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Wash contaminated clothing before reuse. Get medical attention if

irritation occurs.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Call a poison center or doctor/physician if you feel unwell.

Ingestion IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a poison center or

doctor/physician if you feel unwell.

Most important symptoms and effects

Symptoms May cause irritation to the eyes, skin, gastrointestinal, and respiratory systems.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable or combustible.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert

(i.e. vermiculite, dry sand or earth) absorbent material.

Methods for Clean-Up Sweep up absorbed material and shovel into suitable containers for disposal. Flush spill

area with water. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or

smoke when using this product. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away

from combustible materials, herbicides and fungicides.

Incompatible Materials Strong bases. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
1310-58-3			

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Ensure that

evewash stations and safety showers are close to the workstation location. Ensure

adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Goggles. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Rubber gloves. Long sleeve shirt and long pants. Refer to 29 CFR 1910.138 for appropriate

skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash face, hands

and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceClear liquidOdorNot determinedColorClearOdor ThresholdNot determined

Revision Date: 22-Nov-2015 VLS-157 - Stress Master

Remarks • Method

Property Values 7.0-7.5 pН

Melting Point/Freezing Point Not applicable

> 100 °C / > 212 °F **Boiling Point/Boiling Range**

Flash Point Not determined **Evaporation Rate** Not determined Flammability (Solid, Gas) Not applicable **Upper Flammability Limits** Not applicable **Lower Flammability Limit** Not applicable Not applicable **Vapor Pressure Vapor Density** Not determined **Specific Gravity** 1.50-1.54 Water Solubility Soluble

Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products

Phosphorus oxides. Ammonia.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Do not inhale.

Ingestion Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphorous acid 13598-36-2	= 1500 mg/kg (Rat)	-	-
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phosphorous acid 13598-36-2		6980 - 9784: 96 h Brachydanio rerio mg/L LC50 static		
Potassium hydroxide 1310-58-3		80: 96 h Gambusia affinis mg/L LC50 static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Potassium hydroxide	0.65
1310-58-3	0.83

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

<u>California Hazardous Waste Status</u> This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical Name	California Hazardous Waste Status
Potassium hydroxide	Toxic
1310-58-3	Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

<u>IMDG</u> Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Phosphorous acid	Present	Х		Present		Present	Х	Present	Χ	Χ
Potassium hydroxide	Present	Х		Present		Present	Χ	Present	Χ	Χ

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium hydroxide	1000 lb		RQ 1000 lb final RQ
1310-58-3			RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide	1000 lb			X

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphorous acid 13598-36-2	X		
Potassium hydroxide 1310-58-3	Х	X	Х

16. OTHER INFORMATION

NFPA **Health Hazards Flammability** Instability **Special Hazards** Not determined Not determined Not determined Not determined **Health Hazards Physical Hazards Personal Protection Flammability** HMIS Not determined Not determined Not determined Not determined

Issue Date:10-Nov-2015Revision Date:22-Nov-2015Revision Note:New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet